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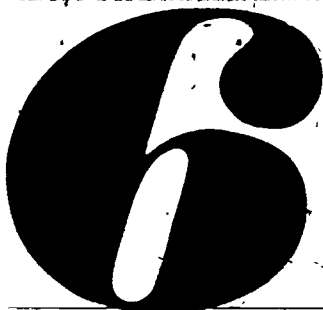
ED 224 452

HE 015 831

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TITLE State Planning, Budgeting, and Accountability: Approaches for Higher Education. AAHE-ERIC/Higher Education Research Report No. 6, 1982.
INSTITUTION American Association for Higher Education, Washington, D.C.; ERIC Clearinghouse on Higher Education, Washington, D.C..
SPONS AGENCY National Inst. of Education (ED), Washington, DC.
PUB DATE 82
CONTRACT 400-77-0073
NOTE 58p.
AVAILABLE FROM American Association for Higher Education, One Dupont Circle, Suite 600, Washington, DC 20036 (\$5.00, members; \$6.50, nonmembers).
PUB TYPE Information Analyses - ERIC Information Analysis Products (071) -- Reports - Descriptive (141) -- Branch Around (888)
EDRS PRICE MF01/PC03 Plus Postage.
DESCRIPTORS *Accountability; *Board of Education Role; *Budgeting; College Planning; College Programs; College Role; Coordination; Educational Assessment; Financial Problems; Governance; *Government School Relationship; *Higher Education; Institutional Autonomy; Management Information Systems; Policy Formation; Private Colleges; Retrenchment; State Boards of Education; State Colleges; *Statewide Planning
IDENTIFIERS Program Duplication

ABSTRACT

Statewide planning for higher education and the approaches that states take to budgeting and accountability are reviewed in this monograph. Statewide planning involves identifying problems and collecting relevant data, analyzing interrelationships among variables, and choosing the most desirable alternatives to reach objectives. State-level higher education planning typically is done by the state higher education board. Requisites for planning effectiveness are university participation in state-level planning and university planning on the foundation of the state-level plan. There appears to be a trend toward: continuous, short-range planning due to uncertainty of the future; the refinement of scope and mission review, a close connection between statewide planning and program review; and attention to plan implementation problems. State boards have attempted to ensure diversity of instructional programs, and most states include private institutions in their planning perspectives to reduce duplication and competition. It is suggested that higher education retrenchment will continue to be required in most states during the 1980s and 1990s. State budgeting approaches are categorized as incremental, formula, or rational, and the budgeting decision-making process may be assisted by information systems. State interest in accountability for the private sector, the relationship between accountability and institutional autonomy, and efforts of governing and coordinating types of statewide boards to balance state and institutional interests are addressed. A bibliography is appended. (SW)



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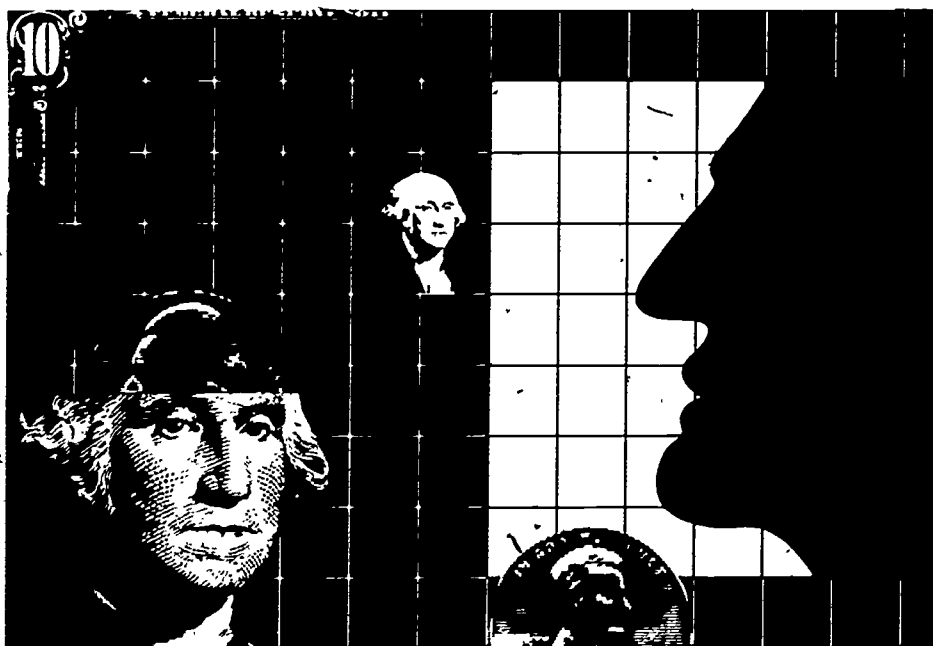
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State Planning, Budgeting, and Accountability

Carol Everly Floyd

Approaches for Higher Education



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State Planning, Budgeting, and Accountability:

Approaches for Higher Education

Carol Everly, Floyd

AAHE-ERIC Higher Education Research Report No. 6, 1982

Prepared by



Clearinghouse on Higher Education
The George Washington University

Published by



American Association for Higher Education

Cite as:

Floyd, Carol Evelyn. *State Planning, Budgeting, and Accountability: Approaches for Higher Education*. AAHE-ERIC Higher Education Research Report No. 6, 1982. Washington, D.C.: American Association for Higher Education, 1982.

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This publication was prepared with funding from the National Institute of Education, U.S. Department of Education, under contract no. 400-77-0073. The opinions expressed in this report do not necessarily reflect the positions or policies of NIE or the Department.

Foreword

This research report by Carol Everly Floyd, assistant deputy director for academic affairs for the Illinois Board of Regents, is built upon the foundation of an earlier report in this series by Richard M. Millard. His *State Boards of Higher Education* (Research Report No. 4, 1976) focused primarily on historical development and types of boards including their function, powers, and structure. The literature on state higher education policy making subsequent to Millard's report gives attention to statewide board powers and structure but has been considerably broadened. Some of the issues, trends, and directions identified by Millard now deserve additional analysis based on new reports and evaluation of experience in various states. Although the statewide higher education board remains the principal state-level authority engaged in planning, legislative and gubernatorial staffs are heavily involved in budgetary analysis and the design of accountability approaches. Subsequent to 1975, there has been statewide planning on a number of issues not generally addressed earlier - such as adapting to declining enrollment. Budgetary practices have evolved and new issues have emerged during a period of retrenchment. Consistent with Millard's prediction, pressures on institutions to demonstrate their accountability to state government have increased. Various accountability approaches have developed.

Because Millard's report thoroughly covers the earlier work, this report will limit itself to literature from 1975 and later with only selective reference to earlier classic volumes.

The primary institutional focus of this review is public universities. Questions concerning the role of private higher education in meeting total state needs also receive some attention. Only consolidated governing boards that govern all public universities in a given state and statewide coordinating boards are examined. Because of length restrictions of the report series, topics relating to community colleges and other types of postsecondary institutions along with topics relating to state governing boards for a single campus or multicampus grouping that exist in conjunction with regulatory statewide coordinating boards are excluded here but will be addressed in future reports.

Jonathan D. Ffle

Director

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Overview

State universities have been established by statute or by provisions in state constitutions, and the general revenues of the state provide well over half their general educational budgets. Private universities typically are authorized in some manner by the state and increasingly benefit from some indirect and direct funding.

State policy making for higher education is made through a complex process involving a number of parties and a number of stages. A variety of political factors are involved as competing interests, individuals, or groups interact over the preferred formulation and outcome of a given policy issue (Hines and Hartmark 1980).

The state-level authorities involved in policy making include statewide higher education boards, the legislature, and the governor. The term "statewide board" or "state board" is used generically to include any board, commission, department, council, or other agency that has authority over all public universities in a state and whose functions minimally include planning. The three major areas in which most statewide boards have some responsibility that is either prescribed by law or developed as policy are: planning, program approval, and budget development. Currently most statewide boards are either consolidated governing boards for all public universities in a state or coordinating boards that have substantial regulatory authority. Statewide governing boards are vested with authority and responsibility for all decisions and resources of any given university. A coordinating board performs a number of statewide functions but does not replace and assume the duties of governing boards (Millard 1976).

Many statewide boards were established by legislative and gubernatorial action prior to and during the 1960s in order to provide for the orderly growth of higher education and so that state political leaders could avoid serving as arbiter for the demands of competing universities. The primary focus of state-level policy making was planning and budgeting for additional student spaces and new programmatic development.

Beginning in the mid-1970s, however, direct legislative and gubernatorial interest in higher education policy making increased. With sizable professional staffs at their disposal, state political leaders are able to draw upon additional expertise in formulating tough questions about university budgets. Increasingly held accountable by the citizenry of the state, state political leaders look, in turn, to all organizations supported primarily by state tax revenues to demonstrate their accountability.

General Themes

In most states, the higher education policy issues for the remainder of the 1980s and 1990s will be far more complex and difficult to address than those of previous years. Ensuring programmatic access and diversity will be especially demanding during a period when declining enrollment and financial support are likely to require retrenchment throughout higher education. Within the constraints of the budgetary total allocated to higher education, states will continue to seek the proper mechanisms to recognize

the fixed costs of university operations, promote qualitative improvement, and provide incentives for innovation. Attention also will be given to the technical and political problems of demonstrating the effectiveness and results of higher education services and operations.

Multiple state-level authorities typically will continue to be involved in state-level review processes. Although the statewide higher education board will play a prominent role in many areas, the legislature and governor also will be active. Because state political leaders regard budgeting as central to policy making, governors and legislatures will increase the variety and depth of budgetary analysis completed by their staffs in conjunction with the appropriations process. Strong legislative and gubernatorial initiatives with regard to the demonstration of accountability can also be expected. The redundancy of review by multiple state-level authorities has both positive and negative aspects. In certain crucial policy areas, it is appropriate to the American system of "checks and balances," but in other areas it is not needed to serve state purposes and can be burdensome for institutions. Although redundancy of state review may be reduced somewhat, it will continue to the extent that it reflects the views that state political leaders hold of their proper roles and prerogatives.

The interests of higher education institutions will be well served by statewide boards being assigned broad functions and pursuing these powers assertively while paying attention to the concerns expressed by and maintaining amicable relations with the governor and legislature. A strong role for the statewide board relative to other state-level authorities is desirable because in most states that board provides more institutional access and is more sensitive to institutional needs than are other state-level authorities. The statewide board role in planning has always been especially strong. Focused attention should be given to budgeting as that role is unsettled because of continuing legislative and gubernatorial initiatives. Opportunities are likely to be especially favorable for board influence on accountability approaches because of successes with program review and a fluid set of circumstances relative to approaches at the institutionwide level. Institutional involvement in board development and refinement of accountability approaches will be crucial to the success of these approaches.

Attention has been given and will continue to be given to better rationalizing and integrating various state-level policy-making processes. Much of the earlier effort was spent in formally meshing planning and budgeting through rational budget approaches. These approaches helped shape budget analysis positively but had little impact on final budget negotiations. Continued attention needs to be given to common-sense integration of a number of processes, particularly in the stages where primarily the statewide board and institutions are involved. Joint efforts of institutions and boards to relate planning, program review, and budget recommendations are necessary to ensure quality and vitality during a period of financial stringency.

Commitment to the development and improvement of good state institu-

tional relations is important to sound state policy development and implementation. Such relationships must be based on a thorough understanding of the complexities of both institutional autonomy and institutional accountability to the state. Institutional autonomy is also increasingly viewed as having a multi-dimensional relationship with accountability rather than as its polar opposite.

Institutions have played and will continue to play an active and important role in state policy making for higher education. They provide their carefully considered advice on a number of issues and lend the technical expertise of their staffs to a number of state-level activities. Campus-level planning and program review activity is often the first step in state-level activities and is necessary for the ultimate effectiveness of these activities. Campuses frequently have influenced statewide planning significantly because of the acknowledged consensual nature of many of the elements of the activity. Institutions currently have a good opportunity to work with statewide boards on developing and refining performance measures that respond to legislative and gubernatorial accountability concerns and thus avoid further, more direct involvement from these sources.

State/Institutional Relations

State-institutional relations are a major element underlying all aspects of state policy making and implementation and have always been a primary focus of the literature on state policy. This chapter examines the two major topical areas in that literature. The first is the impact of statewide board type (governing or coordinating) upon the ability of the board to balance state and institutional interests properly. The second is the nature of and limitations upon institutional autonomy and the relationship between autonomy and accountability.

Statewide Boards: Governing and Coordinating Models

Early commentaries emphasized that statewide boards are able to provide balance in state policy making between state and campus perspectives and to channel political conflict in a rational manner (Glenny 1959; Berdahl 1971). Subsequent analyses view statewide boards more as participants in the political process and less as an alternative to political conflict (Hines and Hartmark 1980, Gove and Floyd 1975). A major example of this view is a collection of papers dealing with problems and future prospects of statewide boards that has as a recurring theme the need for such boards to develop and maintain effective political relations in order to provide maximum strength for their policy recommendations (Berdahl 1975).

During the 1950s and 1960s, a number of states had voluntary coordinating councils that conducted modest planning activity within the limits of consensual agreement between all state institutions. During the 1970s, with stronger assertion of state concerns about public higher education, the trend has been away from voluntary coordination toward coordinating boards with a number of regulatory powers over institutions and toward consolidated governing boards (Millard 1976). Considerable variation exists from state to state in the powers of the statewide board, and controlling statutes have been changed from time to time (Millard 1980; Education Commission of the States 1981).

The Carnegie Foundation for the Advancement of Teaching has remained a strong supporter of voluntary rather than regulatory coordination. It believes that a voluntary council is the best agency to prepare long-range plans and opposes the establishment of regulatory coordinating boards to perform planning or other functions. If a state must go beyond an advisory mechanism, the Foundation considers it preferable to establish a consolidated governing board. Reasons provided for favoring a consolidated governing board include minimizing the number of levels of surveillance or control to which campuses are subject, maximizing the decision making within and among institutions, and providing a direct chain of command for implementing decisions that is likely to be especially helpful during retrenchment. The Carnegie Foundation recognizes that consolidated governing boards traditionally have been weak in planning and therefore suggests that an additional state commission with advisory powers in planning will be needed (Carnegie Foundation for the Advancement of Teaching 1976).

The strengths and weaknesses of the governing and coordinating models for statewide board structure have been examined by a number of commentators. Generally, the statewide governing board has a clearer role than does the coordinating board because it is understood to be an advocate of institutional interests to state government. The coordinating board role is more ambiguous because it involves a more complex balancing of state and institutional perspectives. Because of their greater role clarity, consolidated governing boards are more stable during periods of state political upheaval than are coordinating boards (Mingle, Berdahl, and Peterson 1981). The situation a governing board faces when it believes that major changes in institutional mission, including merger or closure, are called for is far less politically and organizationally complex than that faced by coordinating boards (Mingle 1981).

The coordinating board model involves a governing board for each campus or for multicampus groupings in addition to the statewide coordinating board. Glenn views this model as more appropriate because it separates governance and coordinating functions instead of merging them to the detriment of both. The coordinating board model is more conducive to institutional independence and diversity as well as to vigorous planning and budget review with a truly statewide perspective (Glenn 1976a).

The most frequently cited advantage of the coordinating board is its greater acceptability as an impartial evaluator in statewide accountability plans and on matters related to or influencing the private sector. A statewide governing board is not well accepted by state political leadership in the role of performance evaluator because it is viewed primarily as an advocate for institutional interests (Folger 1980a, Education Commission of the States 1980). Any board that governs public campuses also is viewed as too closely aligned with public sector interests to perform roles that require a perspective sensitive to the needs of all institutions of higher education (Mortimer and McConnell 1978, Wilson 1980). Although causality is not imputed, direct and indirect state financial support for private institutions is relatively low in states that have a consolidated governing board for public universities (Glenn 1976a).

Appropriate leadership styles for the administrative heads of statewide boards vary depending on whether the governing or coordinating model is adopted. Although the governing board adopts a clear identification with the institution it governs, the coordinating board must more closely identify itself with state government. Opinions vary as to whether the coordinating board needs to balance itself almost midway between institutions and state government or whether it needs to align itself with state government (Millett 1975, Holderman 1975).

Mortimer and McConnell suggest the model that will be most effective in a particular state will depend on conditions of historical development, the extent and sources of political intervention, and many other conditions. A structure that is useful at one point may not be at another (Mortimer and McConnell 1978). Although Glenn is a strong supporter of

coordinating boards, he has suggested that there may be little difference between the two types of boards if the trend continues toward adding powers to coordinating boards similar to those previously exercised by governing boards (Glenny 1976a).

Institutional Autonomy and Accountability

Much of the early literature relating to state institutional relations focused on the proper roles that institutions and state level authorities play in policy making for higher education. The Carnegie Commission on Higher Education (1971, 1973) as well as a task force of the Education Commission of the States (1973) emphasized the need to delineate the roles of institutions and of state-level authorities more carefully in order to approach a consensus on the rules of the game. Such literature took as its goal the establishment of mutually satisfactory procedures for review and decision making so that each sector could perform effectively in its respective jurisdiction and area of expertise. More recently, however, the difficulties of maintaining such organizational lines of authority, roles, and responsibilities have been recognized (Hines and Hartmark 1980).

Greater recognition of the overall political environment and of the difficulties of identifying separate jurisdictions for universities and state-level authorities has been reflected in recent analysis of the concept of university autonomy and its relation to state accountability expectations. Perceiving more compatibility between institutional autonomy and accountability to the state, many commentators provide a relatively positive context in which institutions can view accountability expectations.

Hines and Hartmark strongly disagree with posing issues about autonomy and accountability in zero sum terms. New state policy initiatives and requests for information may or may not result in a direct loss of autonomy. They suggest that institutions recognize that interactions between institutions and state-level authorities on such matters are simply one variant of political conflict and of attempts to redistribute political power. More research needs to be done on the dynamics of the relationship between public universities and state government in order to better understand the factors determining the relative influence of each of the interacting parties (Hines and Hartmark 1980). The meaningful questions for analysis are "what decisions are made, by whose authority, at what level of detail, with what effect on the perquisites of either the university or the state" (Hartmark 1978, p. 83).

Some campus-based commentators view accountability as a precondition for university autonomy rather than as inconsistent with it (Dressel 1980, Adamany 1979). Adamany suggests that institutional willingness "to specify and employ methods of self-evaluation that can be audited by state agencies is at the heart of any argument for the wide delegation of authority" (1979, p. 32). Adamany also warns institutions that they should work to develop better measures to assess the quality and effectiveness of their activities rather than assert that appropriate measures do not exist. Such assertions are not credible when they come from institutions that

cast themselves as social critics and whose faculties are heavily engaged in developing evaluation methods for other kinds of organizations (Adamany 1979). Dressel suggests that institutions should not only work to demonstrate accountability to ensure their autonomy but also should be concerned about the autonomy of the statewide board. A board free of undue influence from other state-level authorities and the federal government is crucial to institutional autonomy (Dressel 1980).

The operations of statewide boards and of other statewide administrative structures have tended to protect, rather than to thwart, the academic freedom of faculty members. Although academic freedom problems may arise from time to time in some states due to the initiatives of state political leaders, administrative structures and procedures have not been the means through which pressure has been exerted (Hartmark 1978). Moving beyond academic freedom, at least one state coordinating board has successfully encouraged regional institutions to delegate more responsibility to faculty (Dressel 1980).

Institutional interests are best served by seeking a high level of responsibility and sensitivity in the exercise of state authority (while protecting central academic prerogatives) rather than by denying the legitimacy of state expectations that higher education demonstrate its accountability. A balanced reaction to requests of state-level authorities for additional accountability information will avoid the two extremes of begrudging minimal or subminimal compliance and of continuing battle (Dressel 1980). Institutions need to make clear that they do not oppose reasonable processes of review and accountability while emphasizing that these processes should not involve excessively detailed regulation that has a particularly deleterious effect (Adamany 1979).

Planning

Statewide planning provides a framework and sense of direction for much of state higher education policy. It involves identifying problems, accumulating data relative to problems, analyzing interrelationships between variables, assessing the consequences of introducing new variables, and choosing the most desirable alternative to reach objectives. Statewide planning is a means of reaching agreement on issues and creating common expectations before higher education budgets are formulated and reviewed. Almost all states have developed state higher education plans but these plans differ as to the extent they have influenced development (Millard 1980).

State-level higher education planning typically is done by the state higher education board. The planning obstacles are similar to those that any public sector planner encounters influencing the behavior of target organizations and groups. Also, the issues raised about maintaining local initiative and creativity are those raised by almost any central planning activity (Breneman 1981).

This chapter addresses patterns of participation, process trends, and major substantive foci. Current foci include ensuring programmatic access and diversity, preserving the role of private universities, and adapting to declining enrollment and financial support.

Patterns of Participation

Requisites for planning effectiveness are university participation in state-level planning and university planning on the foundation of the state-level plan. Millard (1980) notes that groups and individuals should be brought together to develop an understanding of the issues and to move toward consensus where possible or to develop an understanding of the reasons for state-level recommendations and actions where consensus is not possible. The importance of reconciling campus-level planning with state-level planning is well understood (Exo 1977). Glenny suggests that in addition to making such reconciliations after the fact, universities should take the initiative to thoroughly evaluate internally and then advance externally programmatic roles and activities that make sense from an institutional perspective. Overall, he maintains that "an aggressive, realistic planning mode is the best defense against imposition from without of roles and programs for an individual institution" (Glenny 1976b, p. 20).

State-level boards see their planning role as involving not only the direct planning they do and that they specifically require of institutions, but also the facilitation of other campus planning activity. They see themselves as encouraging or facilitating some campus planning activity by providing data with which to work and, sometimes, by providing a lever for the collection of data that otherwise could not be collected. In another pose, they take actions aimed at provoking planning that is in the institution's best interest (Elliott 1979).

The difficulties of access to the state-level planning process generally have frustrated faculty. The influence of faculty advisory committees established by some statewide boards is variable and is related to the ability

of these groups to achieve legitimacy, access, and professional relationships with board staff. Faculty advisory committees do provide new sources of information to boards and mitigate but do not solve the problem of faculty input (Mumper 1981). Berdahl and Gove have provided analysis and have made suggestions to generate membership reaction prior to the development of an American Association of University Professors policy statement in this area. They suggest the following formal structures for faculty input to all statewide higher education boards (a systemwide senate for governing boards and a faculty advisory committee for coordinating boards), serious deliberations by such groups on the character of the partnership in any state between government and higher education, and efforts to change reward structures to provide incentives for faculty having appropriate specific expertise to serve on board technical committees (Berdahl and Gove 1982).

Process Trends

Continuous, short-range planning. The Education Commission of the States speculates that there will be a trend toward what it terms "continuous short-range planning," due to "the uncertainty of the future and the difficulty of maintaining political support for planning during a period of decline" (1980, p. 12). This trend contrasts with the earlier emphasis on comprehensive, long-range master planning. Master planning fell into disrepute by the mid-1970s because the plans of state boards continued to dwell on growth and expansion in spite of the leveling off then occurring in most states (Glenny 1976a). Concerns about the feasibility of all higher education planning activity also have begun to surface. One commentator, for example, has raised the question as to whether goal setting and identification of rational means to goal attainment are either desirable or feasible given the level of environmental uncertainty (Morgan 1978).

Refinement of scope and mission review. Since the late 1970s increasing attention has been focused on the refinement of scope and mission review. Millard (1976) notes that historically such review has been the way that statewide boards help define the boundaries of institutional role and scope as well as preserve and encourage institutional diversity and interinstitutional complementarity. Although success in maintaining differentiation of function has been noted in California (Glenny 1976a), the scope and mission statements contained in most state planning documents have been too general to guide state-level and institutional decision making effectively (Millard 1980).

Especially where resources are severely limited, Callan and Jonsen, (1980) have recommended that the states look closely at the mission of each institution to emphasize the distinctive, cut back on the unnecessary, duplicative, and refocus some missions to provide more effective attention to underserved needs. New attention to strengthening the process of mission review at the state level emphasizes the importance of broad input, which, therefore, makes the process slow and deliberate. As a part of such

a process, some states are assessing the need for comprehensiveness of doctoral mission at doctoral and research universities (Caruthers and Lott 1981).

Close relationship with program review. The insights drawn from program review are of major assistance in statewide planning. Program review has been widely implemented: nearly all state boards approve new programs and a majority have the authority to review at least some existing programs (Barak 1981, p. 213). An extended analysis of program review is provided in the chapter on accountability.

Continued attention to the problems of plan implementation. State political leadership generally has regarded planning for higher education as relatively weak because it has not been well linked to budgetary decision making. A number of commentators have noted the desirability of relating planning more directly to budgeting (Millard 1980, Callan and Jonsen 1980, and Spence and Weathersby 1981). Other commentators note conflicting aspects of planning and budgeting that need to be considered. The data needed for planning tend not to be routine and are difficult to collect, as a part of the budgetary process because of the "rigidity, tight time schedule, information formats, and shallow detail" of budgetary information systems (Purves and Glenny 1976, p. 171).

Purves and Glenny suggest that the connection between planning and budgeting needs to be less "formal and routine" but still "conscious and deliberate" so that the routines of the budget process will not drive out the opportunity for the "more speculative insight and information needed for planning activity to have its effect" (1976, p. 171). Finally, it should be noted that although planning is useful in order to reach decisions on program goals and to build consensus on policies, its products will almost always be altered in the process of specific fund allocation (Schmidtsen and Glenny 1976).

Ensuring Programmatic Access and Diversity

State boards have been vigorous in their attempts to ensure that a broad range of instructional programs are available to their state's citizenry. State initiative is particularly important in new nontraditional programs that are far less likely than traditional programs to arise through normal faculty interests and channels on campus (Bowen, Edelstein, and Medsker 1976).

Reporting on the results of a recent Southern Regional Education Board study of planning for urban universities, Smartt identifies a number of state-level issues about program accessibility. Although urban public universities have grown in recent years because of the convenience and flexible scheduling they offer to place-bound students, they offer fewer programs than do the flagship public universities, which typically are located in less densely populated portions of the state. Urban universities are likely to continue to expand their program offerings because of political support

based on concerns for economic development as well as for service to previously underserved populations. State board concerns about program duplication remain strong, and, therefore, programs in a number of graduate fields are likely to be available only on the basis of cooperative arrangements with the flagship campus. Although cooperative arrangements may not be satisfactory in the long run, they will provide some student access as well as an opportunity for the urban university to demonstrate the extent of local demand. Smartt also notes that urban universities have strong advocates in the legislature and a generally strong political base. State boards will therefore be under continuing pressure to enhance the position of urban universities and may be circumvented in the legislative process if they are not responsive to urban needs (Smartt 1981).

Some state boards have responded to concerns with regard to access and institutional cooperation by recognizing regional councils of universities for substate regions. These councils have contributed to improved planning and communication between institutions (Martorana and Nespoli 1978, Hawk 1978).

By the late 1970s at both urban and nonurban universities, the most pressing problem of program accessibility was the shortage of student spaces in high demand areas such as computer science and business. Universities have responded to the problem by reallocating, within certain constraints, budgetary resources from areas of declining enrollment to those in high demand. These constraints include institutional priorities for protecting program quality in all areas, preventing any element in the university from growing so large as to endanger overall balance, and recognizing the inflexibilities of the faculty personnel system. Reallocation generally has been insufficient to meet the needs of booming fields for reasons including the high costs and shortages of personnel and equipment in occupational and professional areas (Glenny 1978). Generally statewide boards have placed a high planning priority on increasing the budgetary support available to the high demand areas through some combination of new state dollars and university reallocation. In unfavorable state financial circumstances, however, statewide boards generally must limit themselves to highlighting major shifts in enrollment and strongly encouraging greater university reallocation. Institutions cannot take these recommendations lightly especially as they are frequently buttressed by continuing legislative and gubernatorial complaints about constituents being denied admission to high demand programs.

Preserving the Role of Private Universities

Most states had broadened their planning perspective by the mid-1970s to include private universities as well as other segments of postsecondary education. The impetus for this broadening came from a number of sources including Section 1202 of the Education Amendments of 1972 and the increased political organization of other sectors of postsecondary education (Education Commission of the States 1980).

Generally, states view the private sector primarily in terms of the

contribution it makes to meeting overall goals and objectives such as access, diversity, and quality. In such an overall perspective, Jonsen notes, there are really no policies toward the independent sector but only state policies that affect independent higher education" (1980, p. 2).

States continue to seek greater understanding of whether certain kinds of policies and specific conditions generate more conflict than others as part of their attempts to keep tensions between the two sectors down to tolerable levels. Variations in the level of conflict seem to be connected with the relative size of the two sectors, patterns of state financial support, views of the governor and key legislators, and the leadership provided by the statewide board (Berdahl 1978).

Private university participation in planning and program review. A number of states have begun to develop a systematic planning perspective that seeks to fully integrate consideration of both the public and private sectors in meeting the total higher education needs of the state. The Carnegie Council on Policy Studies in Higher Education has emphasized the importance of the public and private sectors considering each other's plans and the necessity of full private university representation in state-level planning and review processes (1977).

The credibility of state-level review processes that influence both the public and private sector depends on establishing procedures that provide reciprocal opportunities to participate and reciprocal obligations to be bound by the results (Miller and Wilson 1980). The degree to which private universities must be bound by decisions or recommendations of the state board remains a sensitive issue with reciprocal obligations related in the best circumstances to carefully defined decision areas. Private university involvement is most effective where the private sector has an independent role at the decision table (Chronister 1978).

Private institutions are not uniformly enthusiastic, however, about participating in the planning activity of the statewide board because of doubts about the effectiveness of such planning and judgments that their real opportunities for influence lie with the governor and legislature. In many states, the executive officers of associations of private institutions believe that the best strategy is noninvolvement (Odell and Thelin 1981).

State financial support for the private sector. In most states, the primary financial support provided to the private sector is indirect and takes the form of need-based student assistance. As of 1979, approximately one third of the states provided some direct institutional aid, either categorical or noncategorical, and six states provided non-need student assistance usually referred to as "tuition equalization" (Jonsen 1980).

State and federal need-based student financial assistance that is portable between institutions has been a major element of the Carnegie approach to the support of students and the financial health of institutions (Carnegie Foundation for the Advancement of Teaching 1976, Carnegie Council on Policy Studies in Higher Education 1977). This mechanism is

attractive because it maximizes student choice and financially rewards those institutions that successfully compete to meet student needs as students perceive them. Breneman and Finn indicate, more specifically, that such need-based student assistance should be sufficiently generous to make it possible for almost all students to be in the range of the private sector but not so lavish as to provide undue incentives for private-sector tuition increases (1978b).

As supporters of a market model, Breneman and Finn would prefer public support of both public and private higher education be in the form of need-based student financial aid and that there be little in the way of direct institutional subsidy (1978a, 1978b). Such an approach would involve a rather drastic reduction of institutional support of the public sector and an increase in public university tuition, accompanied by further increases in need-based student financial assistance. This approach is at variance with the views of the Carnegie Foundation (1976) that very substantial direct institutional support of the public universities continue and the Carnegie Council (1977) that public university tuition be set on its own merits and not specifically to aid private universities. Political resistance to a major reordering of the sort suggested by Breneman and Finn is very strong because of the historic role of low tuition in providing access for low-income and disadvantaged groups and the opposition of public-sector students and institutions (Stampen 1980).

The states do not believe that their general concern about preserving the contribution that the private sector makes to meeting state higher education goals requires them to ensure the well-being or survival of any particular institution or segment of institutions (Jonsen 1980). Jonsen, Bogue, and Chambers identify three possible roles the state might play in providing limited assistance to failing institutions. These are monitoring, nonfiscal assistance, and fiscal support. They argue that if a state wants to offer direct financial support, it should develop specific policies in advance, seek indications that institutions can continue to attract students, and provide assistance only where short-term resources would be sufficient. Problems of strong political pressures for ad hoc response to institutions in trouble are acknowledged (Jonsen with Bogue and Chambers 1981).

O'Neill suggests that states need to take action to protect students when private colleges close. States should develop procedures for maintaining student records and might also consider intervention to affect the timing of closings so that students are minimally harmed (O'Neill 1981).

Maintaining the independence of the private sector. Concerns are frequently expressed about the implications of recent increases in state indirect and direct financial contribution to the private sector for maintaining institutional independence. The Carnegie groups are concerned that the public subsidy of private institutions not become so large that private institutions become more public than private (Carnegie Foundation 1976; Carnegie Council 1977). Undoubtedly, private institutions will face new

state expectations with regard to their performance and their use of tax funds (Jonsen 1980)

Adapting to Declining Enrollment and Financial Support

Higher education retrenchment will be required in most states during the 1980s and 1990s because of declining enrollment and reduced financial support. The Carnegie Council (1980) takes a middle-ground stance on the enrollment picture when it predicts an overall decline of enrollment nationwide in undergraduate full-time equivalents of between 5 and 15 percent between 1978 and 1997. Other studies project anywhere from severe decline to moderate growth depending on the assumptions made about the impact of such factors as improved program marketing and a relatively adverse labor market (Leslie 1978). Many states anticipate revenue stagnation, strong public pressure for tax reduction, and increased competition among various state-funded organizations (Mortimer and Tierney 1979).

The Sloan Commission on Government and Higher Education has identified the decisions that states make about retrenchment to be crucial to the diversity and variety of higher education made available to the next generation (1980). Bowen and Glenny emphasize the importance of state higher education boards working together with the executive and legislative branches to maintain a continuing dialogue with public universities on retrenchment issues. Prior exploration of critical issues will suggest the quantitative and qualitative information necessary for decision making and will help narrow the areas of dispute that will arise when tough budgetary decisions finally have to be made (Bowen and Glenny 1976).

Although state planning is more essential in a period of retrenchment than in a period of growth, it is also more difficult during retrenchment because tensions between the board and universities grow and the board is subject to increasing criticism from all quarters (Millard 1976). Legislative and gubernatorial support for planning will be difficult to maintain because there are no political rewards connected with retrenchment. The broad faculty and student participation regarded as necessary for successful planning also will be difficult to maintain because these groups will find little incentive to support retrenchment (Folger 1980a).

States have attempted to deal with problems of retrenchment in a number of ways including enrollment management, alteration of funding formulas, program discontinuation, and merger or closure of public campuses. The alteration of funding formulas has been identified by the Sloan Commission as very important for maintaining both a healthy public sector and a proper balance between the public and private sectors (1980). The character of appropriate alterations will be explored further in the chapter on budgeting. Program discontinuation is analyzed as one possible result of program review in the chapter on accountability.

Enrollment management. At the very minimum, state boards need to take considerable initiative in collecting, analyzing, and monitoring demographic and enrollment data for the higher education community. Mon-

monitoring of institutional trends will allow state boards to offer consultative assistance on modified strategies and programs to institutions that appear to be headed for difficulty (Hollander 1978). In Pennsylvania, where coordinated enrollment planning has been absent, most public and private universities appear to be counting on the same enrollment strategy with the clear implication that increasingly they will be competing for the same students (Crosson 1981).

Enrollment ceilings are employed in some states to control the enrollment at large popular public university campuses in order to preserve the quality of the programs on these campuses and to help distribute enrollment to those public university campuses where previous state investment is underutilized. Bowen and Glennv examined the experience of four states with enrollment ceilings and found a generally positive experience. They also offer a number of cautions including the lack of success in restricting competition among second-choice campuses and the need to more fully explore financial and other impacts (1981a). After reviewing Bowen and Glennv's analysis, Mingle advises that states consider ceilings for public universities if some combination of the following exist: declines in funding of a magnitude to seriously threaten quality at large popular campuses, little differentiation in admission standards between campuses, excess capacity on some public campuses, and availability of need-based student assistance to support students attending private institutions (1981). Although ceilings might be set at any level, typically they have been no lower than current enrollment levels. In some states, however, enrollment targets below current levels may help ameliorate the circumstances of institutions that are overenrolled and thus underfunded. Such targets would be made palatable to the heavily enrolled institutions by a guarantee that no tuition revenue would be lost (Furman 1980).

When overall enrollment declines in a state are relatively small, the Carnegie Council would prefer to rely on the student marketplace to determine which public institutions would contract. Where deterioration is severe, the closure or merger of public campuses is advised in order to avoid universal deterioration. Well informed consumers and fair competition among institutions are necessary for the process to work well (Carnegie Council 1979).

In order to maintain fair competition in higher education, the Carnegie Council advocates codes of fair practice that would be overseen by regional accrediting agencies (Carnegie Council 1979). Bowen and Glennv argue, however, that codes of fair practice might be more intrusive of university life than are enrollment ceilings. They suggest that the circumstances of the specific state will determine which approach is most desirable. In a number of states, the state higher education board, or possibly a consumer protection agency, might be called on to enforce institutional rights and responsibilities under such a code (Bowen and Glennv 1981a).

Merger or closure of public campuses. States are beginning to develop criteria by which they can identify troubled campuses so that plans can

be made to halt further decline or if that is not possible, to plan merger or closure. The University of Wisconsin System has identified specified thresholds of concern that relate to enrollments and costs. When these thresholds are crossed, a task force drawn from the system as a whole makes judgments about the future status of the troubled campus (University of Wisconsin System 1979, Smith 1981).

A proposal to merge or close a public university campus raises an extremely volatile issue that draws an intense reaction from the political constituency of the affected campus in spite of a generally low level of public interest. Mingle, Berdahl, and Peterson have outlined the central points of both proponents and opponents of such proposals and some of the reasons for success and failure. They conclude that mergers and closures will be relatively rare because of the political constraints. Statewide coordinating boards must approach such issues with extreme caution because they may indirectly be putting the whole structure of governance and coordination in the state in jeopardy (Mingle, Berdahl, and Peterson 1981).

Concluding Comments

Research on the following topics is a significant part of working toward the further development and refinement of state-level planning practice process and utilization patterns that tend to be associated with planning effectiveness, additional means for using plans to set budget priorities, and divisions of labor in planning between the statewide board and other state-level authorities that are useful in reducing planning duplication and competition (Glenns and Schmidlein 1980).

Budgeting

The budget is the main instrument of state policy for higher education. A budgetary appropriation is necessary to activate state plans for higher education, and many administrative or regulatory controls are tied to the financing mechanism (Hines and Hartmark 1980).

Budgeting is a complex and multi-faceted process, and some of its facets will vary considerably among the states and over time. In most states, multiple state-level authorities are involved in the budgetary process, and their review is overlapping. States employ various budgetary approaches, and each approach has a number of strengths and weaknesses and also has some tendency to converge over time. Most states also are examining possible modifications of their funding mechanism to be more in tune with declining enrollments and with generally changing cost configurations. States continue to give attention to the difficult tasks of providing incentives for innovation and providing the financial base for qualitative improvement. Concern also continues to be focused on strengths and weaknesses of state-level information systems and possible modifications to better meet state needs and/or minimize campus burdens.

State-Level Agency Roles

Overlap of review. Legislative and gubernatorial budget staffs have grown considerably in both size and sophistication in the past 15 years. As a result, overlaps have developed between the budgetary review conducted by these agencies and the reviews conducted by the statewide higher education board. This overlap has both advantages and disadvantages. From the perspective of democratic values, Schmidlein and Glenn note that some overlap is consistent with shared power and checks and balances. Overlapping review ensures that a multiplicity of perspectives will be brought to bear on budgets and minimizes the possibility that oversight will be spread too thinly. From the perspective of organizational efficiency, multiple information requests and analysis increase the cost of budget review at all levels, increase campus workloads, which indirectly encourages sloppy work and delays decisions (Glenn and Schmidlein 1976).

Toward reducing overlap. Glenn identifies the process for reconciling legislative and executive budgets in the final days of the legislative session as necessary to a system of checks and balances. He identifies a number of other areas of overlap, however, and then suggests how the system of budget review could be strengthened and streamlined by each agency concentrating on its constitutional and statutory functions and areas of special strength. He suggests that the executive budget office concentrate on the following: technical/mathematical review, revenue share for higher education; revenue proportion by type of institution, policy studies on educational finance, aid in developing formulas, and joint revenue projections with the legislature. The executive budget staffs should concentrate on the following: development of policy alternatives to legislative budget, program priorities and oversight, special studies, especially on performance measures, aid in development of formulas, and joint revenue

projections with the executive. Glenn, suggests, finally, that the statewide higher education board should concentrate on the following: continuous planning and broad policy analysis, review of new and existing programs, state-level higher education information systems, budget review for conformance with plans and program priorities as well as special studies, and initiation and development of formulas (1976a).

Striking the proper balance. Commentators seek a balance of influence that includes a strong role for the statewide higher education board. A strong board role is sought because boards are likely to be particularly sensitive to higher education norms and values. Allen notes Glenn's (1976a) expression of concern at the growing influence of legislative staffs relative to those of the statewide board and the executive budget office and suggests that Glenn's findings "can perhaps be understood as a cyclical swing toward legislative power rather than as a trend toward legislative domination" (Allen 1980, p. 25).

In Glenn's view, provision of the broad planning context for the budgetary process is the most important budgetary role of the statewide board and is central to maintaining and increasing board influence. State boards must clarify how program and priority decisions relate to the assumptions, goals, and projections of the state plan. As the legislative and executive staffs wish to be provided this broad context, Glenn sees weakness in this area as a major contributor to loss of influence (1976a). Millard is uncomfortable, however, with Glenn's suggestion that state boards withdraw from some of their budgetary activities because "it would place the institutions in a somewhat more vulnerable position between the executive and legislative branches of government in the political decision-making on the budget" (1980, p. 87).

Budgetary Approaches

The approaches that states take to budgeting can be categorized in rough terms as incremental, formula, or rational. Any one state may use procedures that combine part of two or even three of these approaches. For instance, Allen notes, in describing a nationwide study of budget practices, that all nonformula states have a process for nonformula items and that many states that describe themselves as using rational budget approaches may not differ substantially in practice from incremental budget states (Allen 1980, p. 26).

Incremental approaches. The basic philosophy of incremental budgeting is that the current budget is distributed properly between the current functions and objects of expenditure so that little change among existing programs needs to occur from budget cycle to budget cycle. It starts from the existing base and ordinarily examines costs and benefits only for new programs. It involves the least work and analysis of the three approaches. It also minimizes political conflict because budget participants can assume they will get roughly what they got last year. Caruthers and Orwig

attribute its wide utilization to the fact that it works well because it "recognizes the relative lack of flexibility budget planners in postsecondary education face, it is relatively efficient, and it is attractive politically" (1979, p. 38). Its principal drawback is that it does not directly assess whether budget decisions appropriately support state and institutional goals (Caruthers and Orwig 1979).

Formula approaches. Caruthers and Orwig note that formula budgeting is difficult to describe in a generic sense because it does not enjoy a common meaning in application (1979, p. 38). Miller defines formula budgeting as "an objective procedure for estimating future budgetary requirements of an institution by manipulating data about future programs and by utilizing relationships between program and costs" (1964, p. 6). In some states, budgetary guidelines that apply ratios or formula factors more flexibly than do formulas are used in lieu of budget formulas. Using a definition that encompassed both formulas and guidelines, a 1976 Michigan Department of Education study finds that in almost every state, quantitative guidelines and measures are part of the budgetary process (1976). Gross also notes that the use of formulas to develop institutional appropriations requests may or may not result in actual appropriations equal to or nearly equal to the amounts requested. In many formula states, the formula-derived request is only the starting point after which a number of nonformula adjustments are made. Some states do not fund all institutions at the full-formula rate. A number of states can fully fund the formula-driven requests only in years when there have been good tax receipts (Gross 1979).

A number of advantages are frequently cited for formula budget approaches. One is that formulas provide an objective base for equitable treatment of the various public universities so long as proper attention is paid to differences between disciplines and levels of instruction. Formulas are also regarded as reducing the complexity of the budgetary process especially for state political leaders and thus as easing the communications among all who are involved in the process. The fact that formulas add an element of routine and predictability to the budgetary process tends to minimize conflict among universities and between universities and state-level authorities (Gross 1973, Millett 1974, Moss and Gaither 1976, Meisinger 1976, Schmidlein and Glenny 1976, Holmer and Bloomfield 1976, Linhart and Yeager 1978; Caruthers and Orwig 1979).

Some disadvantages are imputed to formula budgeting that would hold true for any enrollment circumstances in a particular state. Formulas frequently lack incentives for innovative practices, provide no start-up funding for new programs, encourage institutions to expand high cost programs, place too great an emphasis on producing "fundable" units without regard to quality, and typically discourage nontraditional and noncredit instruction (Gross 1973, Moss and Gaither 1976, Linhart and Yeager 1978, Gross 1979, Caruthers and Orwig 1979, Allen and Topping 1979).

In a period of declining enrollment, the average-cost orientation of budgetary formulas is disadvantageous to universities because costs do not decline proportionately to enrollment. The average-cost orientation is a factor in other budgetary approaches as well and is further examined in a subsequent section of this chapter. Mersinger notes that formulas revised to reflect enrollment declines will reduce conflict between universities only if all public universities are experiencing similar declines. When there is wide variety in enrollment change, a modified incremental approach is more likely to keep conflict within reasonable bounds. Refined cost data can still be used to maintain equity while making more marginal adjustments to the base budget (Mersinger 1976).

A problem that has developed in a number of states is the increasing tendency of the state legislature to view formulas as operational plans for expenditure rather than as measures for fund acquisition (Glenn and Bowen 1977, Spence 1978). Such formulas are intrinsically, however, ill-suited to be operational plans. Formulas relate to fund acquisition and concern relationships among projections. Expenditure plans deal with the real circumstances that exist more than a year after the projections were made (Mersinger 1976, Glenn and Bowen 1977). Periodic cost studies and evaluations of performance by the statewide board are suggested as more productive and less expensive ways to discover deviations from legislative intent (Schmidtlin and Glenn 1976).

Rational approaches. A number of states have attempted to develop formal links between planning and budgeting so that budgets directly reflect state program and policy objectives. The new budget systems have had a variety of orientations and names. One is planning, programming and budgeting (PPB) and another is zero-based budgeting. A third approach, performance budgeting, bases budget allocations on performance criteria.

Although none of these rationalized budget systems has been fully implemented in any state, commentators have identified a number of positive effects of even limited use. The Education Commission of the States (ECS) notes that new budget systems "may shape the decision process and focus it" (1980, p. 72). Hartmark finds that a significant number of state budget decisions regarding the University of Wisconsin System "were decided primarily on a 'rational' rather than 'political' or 'intuitive' basis because PPB-type information was available to decision makers (1978). Lingenfelter concludes that new budget systems provide rational directions for change that then occurs in incremental steps (1974).

Rational budget systems regularly encounter both technical and political problems in full implementation in the public sector including public higher education (Wildavsky 1974, 1975). Initial budget review on the basis of objective criteria is followed by a final decision process that is basically a political negotiation. ECS notes that these systems are "frequently abridged or ignored" during recessions and after a political turn over and, therefore, "lack the stability needed to have a lasting impact on the policy and program objectives of the state" (1980, p. 72). ECS also

expresses concern about the frequency of change in budgetary practice that has occurred in many states that have struggled with new budget systems. Frequent changes "generally weaken communication and may increase considerations of political power in budget decisions at the expense of more objective factors" (Education Commission of the States, 1980, p. 72).

Convergence of approaches. Some additional convergence of budgetary approaches is likely in the next 10 years. Gross identifies budgetary practices in Illinois, which he labels as "an objective form of incremental budgeting," as incorporating the positive aspects of formula budgets while minimizing formula pitfalls (1979, p. 5). In Illinois, appropriations requests are derived by adjusting projected expenditures for the current year for increases or decreases in marginal costs and tuition revenue based on enrollments and then adding increases for salaries, operating budgets, utilities, library materials costs, and new building maintenance costs as well as support for programmatic development, expansion, reorientation, and qualitative improvement (Illinois Board of Higher Education 1980).

Caruthers and Orwig are hopeful that perceived deficiencies in new budget plans will be remediated by procedures that "recognize the inflexibility of the base and that minimize paperwork and analysis (as does incremental budgeting)" and "that provide predictability and routinization of decisionmaking (as does formula budgeting)" (1979, p. 59).

No matter what the specific budgetary approach, state budgeters have faced and will continue to face a number of problems in channeling available funds to meet higher education needs.

Budgeting for New Higher Education Circumstances

Statewide boards are giving increased attention to budgeting for new higher education circumstances and to encouraging innovation and qualitative improvement. A number of new perspectives and mechanisms, described below, have been developed. The actual impact of these new perspectives and mechanisms will depend on the amount of monies appropriated by legislatures and governors. Ameliorating effects will be minimal if appropriations are relatively small because of unfavorable tax revenues and if the rate of inflation is rapid (Folger 1980a).

Enrollment decline. Increasing interest is being focused from two different perspectives on the workability of state budgetary formulas and guidelines for public universities during a period of enrollment decline. One concern, shared by the Education Commission of the States (1980) and the Sloan Commission on Government and Higher Education (1980), is that state budgetary guidelines and formulas be constructed so that cutthroat competition for students is discouraged. The second is that the impacts of declining enrollments on the cost configurations of universities be accurately reflected in the budgetary process. It is widely recognized that some university costs are fixed, and do not decline as rapidly as enrollment.

ECS has identified three ways in which some states have reduced the importance of enrollment in budget allocation. First, some states have developed formulas that differentiate between fixed and variable costs in order to reflect in their allocation the marginal costs to universities of increases or decreases in enrollment. Second, other states have appropriated funds for a target enrollment at each institution with a specific allowed deviation—for example, 10,000, plus or minus 400. If the actual enrollment is in this range, no adjustment is made. A "corridor" concept underlies this funding method. The corridor can be wide or narrow and is expressed as a percentage or numerical width. Third, still other states fund on the basis of average enrollment level during the past three to five years. The averaging method cushions reduction for universities with declining enrollment and slows budgetary increases for growing institutions (Education Commission of the States 1980).

Only the first of the three alternatives identified by ECS, formulas that differentiate between fixed and variable costs, has been widely commented upon in the literature. The adoption of such formulas has been widely supported from both the institutional and state-level perspective (Carnegie Council on Policy Studies in Higher Education 1980, Sloan Commission on Government and Higher Education 1980, Education Commission of the States 1980, Allen and Topping 1979, Monical and Shoenecker 1979, Spence and Weathersby 1981, Callan and Jonsen 1980, Spence 1978, Leslie and Hyatt 1981).

Technical and political problems with the utilization of marginal cost formulas have also been examined. Allen and Topping note the difficulties of separating fixed and variable costs and the fact that marginal costs are not constant even in relatively narrow ranges of enrollment. They also note that the relative complexity of marginal cost formulas is not consistent with the political principle that formulas must be easily understood. Therefore, those who construct marginal cost formulas need to keep firmly in mind the trade-off between accuracy and simplicity in order to minimize problems of political acceptability (Allen and Topping 1979).

Some commentators have responded to what they consider to be an implied criticism of marginal cost formulas—that they reward those institutions that have attracted the smallest number of students. Mingle notes that the marginal cost orientation allows time to implement cutbacks and to protect students from precipitous decline in the financial support for any one institution (1981). The Sloan Commission on Government and Higher Education (1980) and Spence and Weathersby (1981) suggest that calculating an accurate cost for operation of institutions at reduced enrollment levels but with no diminution of quality will help clarify elements of the decision that ultimately will be made about campus mergers or closings.

Changing cost configurations. Relating funding to marginal costs, as discussed above, is a response to changing cost configurations resulting from enrollment decline. States also must face other cost trends that are influ-

enced by a number of forces. Factors primarily external to universities that drive university costs upward at a rapid pace include inflation, mandated social programs, and increased government regulation (Spence 1978). Strong demand for remedial instruction and provision of student services to an increasing number of individuals as part-time enrollment grows also push university costs upward. Enarson suggests that universities face an awesome series of future costs due to depreciation of capital items. These costs would be a problem even if enrollment and funding growth had been sustained. Areas of need include equipment replacement, building maintenance and repair, and renovation (Enarson 1979).

Budgeting for Innovation and Qualitative Improvement

The perception of both institutional leaders and state-level authorities is that state budgeting does not lend itself easily to encouraging institutional experimentation and innovation. As of 1977, however, 20 states encouraged local initiative through incentive grants distributing limited funding on a project basis through open competition (Mingle 1977, p. 6).

During the 1970s at least two states set aside funding explicitly for qualitative improvement of programmatic services. These funds were distributed outside the state budget formula. In Tennessee, each public university has been allowed to set its own performance goals in an area of its own choosing but consistent with its state-approved institutional mission. When the institution can demonstrate that it can meet its own objectives, the financial reward is released (Bogue and Troutt 1980, Caruthers 1980, Education Commission of the States 1980, Dumont 1980). Florida identified areas of the university system that need improvement (including libraries and teaching research equipment) and a limited number of "programs of emphasis" that should receive additional funding to enable them to gain national distinction. Proposals for "programs of emphasis" have been reviewed by a statewide group, and, after a few years, at least one such program has been identified at each university (McTarnaghan 1980, Caruthers 1980, Education Commission of the States 1980).

Although a number of states may use the opportunities presented by declining enrollments to bolster qualitative aspects of programs that were allowed to slip under enrollment pressure, qualitative improvement is unlikely to become a major budgetary focus. Qualitative criteria are not easily translated into a form that allows them to function as operational criteria (Morgan 1979). Until better ways are developed to measure positive student outcomes, and the attainment of state goals, legislative staffs and the state budget office are unlikely to pay much attention to concerns about qualitative improvement.

State-Level Information Systems

States have established information systems in order to increase the volume and sophistication of the information available to them for budgetary and other decision making. Yet the information from formal information systems is not heavily used by any state-level authority because there are

both technical and political problems. Certainly the views brought to the final political negotiations are conditioned primarily by the judgment of close associates and personal experience (Schmidtlein 1977).

Commentators identify problems with higher education data systems and suggest solutions of various sorts. Bryson and Posey note substantial consensus in the literature that reassessments of data systems should deal primarily with underlying policy assumptions and human factors and should avoid concentrating on technical methods of implementation (1980). Purves and Glenny offer the concept of "analytical due process," somewhat similar to administrative due process, as appropriate for examining decision making in public higher education. In their view, there is a "minimal level of logical and explicit analysis that should be a factor in legitimately reached public sector decisions" (Purves and Glenny 1976, p. 192). Further attention needs to be given to providing enough information to meet decision needs but not so much that both universities that produce it and the state-level authorities that receive it are swamped. Purves and Glenny comparability of data, unsophisticated costing techniques, lack of output measures, and unreliability of data (1976).

Greater attention is now focused on constructing information systems to meet the needs of both state-level authorities and campus administrators. Frequently state-level authorities believe that the data collected in state information systems and the analysis provided at the statewide level will assist in campus-level decision making. That view is not often shared by campus administrators because much detail is lost in the aggregation and institutions often do not receive statewide compilations of the data (Purves and Glenny 1976, Bryson and Posey 1980). Schmidtlein emphasizes that the distinction between central and local decision areas is not clear and that the appropriateness of data to the concerns of the various levels of higher education decision making will remain an area of controversy. He suggests, however, that the controversy may be lessened if a fuller understanding is reached on the limitations affecting the collection and use of data at different levels (Schmidtlein 1977).

Campus administrative leadership continues to seek a reduction of the burdens for campuses of providing information for state-level systems. Two ways have been suggested to avoid adding to the burden and to limit it somewhat. First, the statewide board might provide leadership to the various state-level staffs in coordinating information and data collection efforts aimed at reaching agreement on the important facts related to higher education and in reducing the proliferation of data requests (Glenny 1976a). Also, states should avoid changing data collection formats frequently because attendant design of data collection and accounting systems is expensive and time consuming (Schmidtlein and Glenny 1976).

Concluding Comments

Although the literature is somewhat better developed in the area of state-level budgeting than in related areas, a number of subjects deserve further attention. These include: impact of each state-level authority on institu-

tional budgets, adaptability of various types of formula and other approaches in responding to new circumstances created by enrollment decline and revenue fluctuations, incentives/disincentives for institutions to generate revenues from nonstate sources, impact of state agency roles in administering funds appropriated to institutions (preaudits, line item appropriations, statewide accounting systems), and tradeoffs between level of data requirements for state-level information systems and the costs of production (Glenny and Schmidlein 1980)

Accountability Approaches

Some of the treatment of accountability in the higher education literature is very general and does not clearly indicate its frame of reference. Hartmark indicates that the term *accountability* is difficult to define because it refers to a process rather than an end product. He defines accountability as "those practices, policies, and procedures by which a public higher education system demonstrates its legitimacy and value as a state-supported enterprise" (Hartmark 1978, p. 56). Through this process, the university demonstrates "the appropriateness of its goals, the effectiveness and quality of its programs, and the efficiency of its operations in providing service to the state and its citizens" (Hartmark 1978, pp. 56-57).

This chapter categorizes approaches for assessing results and effectiveness of higher education operations on the basis of the focus of the approach—degree programs, institutionwide activities, and statewide board functions. It also briefly examines state interest in extending accountability expectations to higher education's private sector. This treatment of relatively specific approaches complements the more general treatment of the relationship between accountability and institutional autonomy that is included in the chapter on state-institutional relations.

A great deal has been written about the program review approach that focuses primarily on specific degree programs. Less has been written about approaches with different foci that also have been less widely implemented. Analysis of a number of approaches is relatively speculative and especially so when implementation has occurred in few states or is still pending.

The literature suggests substantial variability in the process and criteria used in these approaches. As would be expected, there are differences between institutions and state-level authorities and among state-level authorities as to the acceptability and usefulness of many of the approaches.

Program Focus

Program review is an assessment of the need for and effectiveness of a proposed or existing program. State-level program review denotes a formal process carried out by a board with statewide responsibility. Such state-level review is conducted in accordance with established procedures and may or may not include an active institutional role (Folger 1977a).

Accountability to state-level authority for effective accomplishment of the state's higher education purposes is the broadly construed purpose for program review that can subsume other purposes that have been attributed to it (Green 1981, Barak and Berdahl 1978). These other purposes include providing for orderly growth by controlling the addition of new programs, ensuring that the statewide mix of programs represents effective use of available resources, and providing for quality control by preventing substandard programs and encouraging good ones (Folger 1980b).

New programs. New program review remains a major concern of most state boards even if expansion has halted. Institutions will propose new programs from time to time, no matter what the general circumstances.

of higher education, because of internal and external factors whose weights will vary. Sometimes they will be responding primarily to internal wishes to develop new programs that encompass new areas of knowledge and interdisciplinary perspectives. On other occasions, Millard notes, they are responding to new clienteles and to high priority manpower or other societal needs (1980). Seven factors are commonly examined, but with various levels of specificity, in state review of new programs. These are program description, purposes and objectives, needs analysis, cost analysis, resource analysis, program accreditation (accrediting body, requirements, current status of related programs), and availability of adequate student financial aid (Barak and Berdahl 1978, p. 26). Given the tightened resource circumstances of most states, institutions need to give very close attention to needs, cost, and resource analysis in program development and must be prepared to delete lower priority existing programs in order to obtain the resources to support new programs (Millard 1980).

Off-campus programs. A number of states have established an approval process for the extension of previously approved degree programs to off-campus locations. The primary state-level concerns are that programs be of reasonable quality and that they do not unnecessarily duplicate programs previously established in a given geographic area. Approval is ordinarily required for each specific location. Proposals for new off-campus sites of existing degree programs are likely to become increasingly controversial as institutions seek new off-campus markets and at the same time attempt to protect what they consider to be their "turf" (Mingle 1978b, Ashworth 1979, California Postsecondary Education Commission 1980).

Existing programs. Although in 1970 only a handful of states were involved in the review of existing programs, by 1980 approximately 60 percent of the statewide boards had the authority to review at least some existing programs and to recommend program discontinuance where programs were no longer educationally or economically justified from the state perspective. Most of these state boards have also been given the authority to enforce recommended discontinuances in some manner (Barak 1981, p. 213; Melchiori 1980, p. 170).

Purposes. Statewide boards typically see program review as an extremely important board function for the 1980s and 1990s. The insights about programmatic strengths and weaknesses are crucial to making priority decisions at both the campus and state levels for maintaining and approving higher education services during a period of financial stringency. A very high priority will be attached in statewide planning and budgeting to further developing major areas of strength, improving programs that are important to meeting local and state needs but have not yet reached their potential, and phasing out relatively low priority activity. These concerns suggest continuing attention to linking program review and budgeting, relating program review to scope and mission delineation, and

providing incentives for campuses to engage in renewal and improvement activities (Folger 1980b).

Wallhaus notes that statewide boards are still struggling to develop the linkages and to provide the incentives mentioned above. Problems have arisen at both the state and institutional levels when, as is frequently the case, program review is handled as an add-on rather than as an integral administrative process. Under these circumstances, program review tends to have no direct relation to and little impact on budgeting. Both state boards and institutions need, therefore, to more adequately conceptualize how program review results are to be linked to decision making regarding budget, personnel, and future programmatic direction. Wallhaus concludes that program review processes will be successful "to the extent that they are conceptualized and staffed within the established organizational structures at all levels of higher education" (Wallhaus 1982).

Consensus is lacking on how much emphasis the statewide board should place on using its powers to eliminate programs. Mingle believes that the board power to eliminate programs should be used sparingly even in conditions of retrenchment, with the board continuing to concentrate on the most obvious examples of duplication, low productivity, and incongruence with university scope and mission. In Mingle's judgment, the state board should concentrate on providing the right political environment and incentives for campuses to do their own review aimed at reallocation and retrenchment. He recommends this because he believes state-mandated program discontinuance is not going to produce substantial cost savings and because institutions are in the best position to identify specific programs and personnel to be cut. Institutions must be cautioned, however, that if they do not do their own careful evaluation and priority setting, they should not be surprised about state intervention through budget bills to make decisions for them (Mingle 1981).

Process. Barak and Berdahl make three major points about how existing programs should be reviewed. The most important point is that all parties should adopt a positive spirit. Program review is a process that any self-respecting institution should undertake for its own self-renewal whether the times are financially prosperous or austere. Second, program review should be a cooperative venture between institutions and the states with provision for true institutional involvement in the state-level process from design through deliberative stages. Faculty definitely should be involved in the process. Where the quality of institutional leadership and faculty participation is high, the state may be able to confine itself to a relatively modest monitoring, thus reserving a heavier involvement for those institutions that fail to develop a credible process. Finally, the state-wide board should play the central role in academically oriented program review, and other state-level authorities should focus their attentions elsewhere (Barak and Berdahl 1978). Wilson notes that many states do not, in fact, involve institutions in all stages of program review processes. He categorizes the ways that states include institutions as reactive, advisory, or formative. These three strategies are seen as points along an access to

decision-making continuum with reactive strategies at one end and formative strategies at the other (Wilson 1980).

Moving to more specific aspects of the process, Barak and Berdahl group actual state program review processes into four categories based on where the primary review responsibility lies—institutional, interinstitutional, agency staff, and outside consultant. In the institutionally oriented approach, the state board uses incentives to encourage institutions to review their own programs. Sometimes the state board will assess statewide needs through coordinating institutional reviews or, as in Wisconsin, it might monitor institutional reviews to ensure their quality. As a part of the interinstitutional approach, a committee of representatives from the various institutions provides oversight and is in a position to conduct review from a perspective broader than that of a single campus. A few states conduct review by placing responsibility almost entirely with the state board staff, which requests various types of information from the campuses. Consultant review by experts from outside the state is attractive in some states because it is perceived as the most objective approach, given the deep reliance in the academic community upon peer group evaluation for qualitative judgments. Probably no state fits neatly into any one of these paradigms, and most states use some combination of the approaches (Barak and Berdahl 1978).

A number of commentators have analyzed the alternatives of relying primarily on agency staff and on outside consultants. A totally state-dominated process is unlikely to be accepted or successful because of growing institutional resentment, negative publicity that tends to influence all agency operations, and eventual requests for agency abolition (Melchiori 1980). A number of problems, from both the state and institutional perspective, also have been noted with the use of consultants. Consultants lack a close knowledge of interinstitutional relationships and the general statewide context. Because of their focus on narrowly defined traditional measures, they find it difficult to assess graduate programs that provide access to part-time clienteles and that are not heavily research oriented. In review of doctoral programs, regional campuses may feel that consultants are biased against them and do not believe that quality education can be conducted at institutions that typically were previously teachers colleges (Barak and Berdahl 1978; Mingle 1978a).

In some states program review is conducted by both the statewide coordinating board and by segmental governing boards. A recognition has evolved that each level in such multi-layered systems can bring to bear a different and valid perspective (Groves 1979, Bowen and Glenny 1981b).

Scheduling. At least five alternatives for scheduling program reviews can be identified. Programs can be reviewed on a cyclical basis (for example, once every five years). Schedules can be meshed with external requirements such as accreditation. Selection can be based on key indicators such as enrollment or cost trends. Programs can be reviewed only in a crisis such as one that arises with student or external complaints. Selection can be based on a policy or planning rationale related to certain

program categories (perhaps by instructional level or discipline). Each alternative has, of course, advantages and disadvantages that reflect multiple tradeoffs. Some states have employed combinations of these alternatives in order to meet a variety of needs (Wallhaus 1982).

Criteria. In 1973, a task force of the Education Commission of the States suggested 10 factors that should be taken into account in statewide program review, particularly as it relates to the possible phasing out or consolidation of programs. These are (1) the number of graduates from the program in each of the last five years, (2) the number of students enrolled in the program (entry and drop-out rates), (3) the size of classes and the cost of courses identified as integral elements in the program, (4) cost per program graduate, (5) faculty workload, (6) program quality, as reflected by its regional or national reputation, faculty qualification, and level of positions achieved by graduates of the program, (7) total production of a program's graduates from all institutions in the state, region, or nation, (8) the economies or improvements in quality to be achieved by consolidating or eliminating the program, (9) general student interest and demand trends for the program, and (10) the appropriateness of the program to be a changed institutional role or mission (Education Commission of the States 1973, pp. 51-52). A survey reported by Barak and Berdahl indicates that each of these factors is used by some states, although no one state uses all. The most frequently used, in order, are number of graduates, students enrolled, student interest and demand, appropriateness to role and mission, program quality, and size of classes and costs of courses (Barak and Berdahl 1978).

Barak and Berdahl emphasize the "need for multiple criteria, flexibly applied" (1978, p. 88). They especially warn against an overemphasis on productivity factors because it may encourage a dilution of quality in programs that have been identified as possibly underproductive. Institutions sometimes have resorted to lowered admission standards and easier grading standards in order to improve a program's numerical productivity (Barak and Berdahl 1978).

Consensus is lacking as to how the statewide board should handle the qualitative factors involved in program review because of institutional sensitivities and measurement difficulties. A number of state boards deal with the problem by explicitly stating that state-level reviews will not directly focus on quality and that qualitative review is the responsibility of the institution (Barak and Berdahl 1978). Other states rely heavily on the use of outside consultants, a practice whose advantages and drawbacks have been discussed above. Generally, statewide boards are reluctant to use primarily quantitative measures of quality, but a few statewide board staffs are convinced that quantity and quality are closely related. In particular, the state of Washington has used a number of quantitative measures of program quality in the program review process (Engdahl and Barak 1980, Chance 1980). Hines differentiates between two types of program quality in order to suggest complementary roles for institutions and the state agency. The institution and its faculty should make judgments

about the intrinsic value (merit) of a program, and the state agency should assess the worth of the program in relation to existing and anticipated statewide circumstances (Hines 1980)

Statewide boards face continuing issues on the extent to which the factors of program duplication and projected labor market demand should be used in program review. Martorana and Kuhns provide an interesting but elaborate model for examining program coexistence and similarity for use in examining the extremely complex and sensitive issue as to whether a program "unnecessarily" duplicates one at another institution. (1980) Mingle provides a qualified yes to the question of whether manpower projections can be applied to the program review process. Such criteria are important in professional areas where there should be a close correspondence between a particular degree and specific job titles, but they are less important in arts and sciences areas where other important outcomes of education and broader definitions of need come into play (Mingle 1978a).

Program discontinuance No definitive patterns of program discontinuance exist at this time because many states have conducted program reviews of existing programs for only a few years. Barak finds that most programs eliminated had very low enrollments or were widely duplicated. The largest number can be characterized as "paper" programs, which enrolled few students and involved few, if any, faculty on a full-time basis. Barak indicates that a pattern of program discontinuance of that sort is about what you would expect for the first rounds of program review when the state board is proceeding with extreme caution, with respect for institutional independence, and with a desire to avoid challenges to its program review role (1981).

Although program discontinuance in the public sector has been identified as a useful tool in retrenchment in public institutions, state-mandated program discontinuance has not often resulted in cost savings (Barak 1981, Mingle 1981, Skubal 1979). Most program review to date has not been carried on in conditions of retrenchment and has had other foci. Therefore, it is difficult to tell what might develop in the future (Barak 1981).

Melchiori suggests a number of coping mechanisms for state agencies to win more effective campus cooperation in state-mandated program discontinuance and to stimulate campus initiated reductions. She indicates that state boards generally are aware of barriers to effective program termination on campus but have not involved themselves in a systematic fashion in conceptualizing and implementing any kind of support system. State boards need to monitor more closely possible negative impacts of terminating programs in order to increase their ability to deal with these issues in future discontinuation attempts. Such assessments can take place in a small-scale incremental way (Melchiori 1980; 1981).

Acceptability Campus leadership is unlikely ever to feel fully comfortable with state level review of existing academic programs because this review brings the state board closer to the central academic core of the

university than does any other state level activity. Campuses have largely reconciled themselves to statewide program review as a fact of life. Although campus presidents protest publicly, they privately welcome the external leverage to deal with entrenched interests (Barak and Berdahl 1978). Noting expressions of legislative or gubernatorial interest in the statewide board reviews, institutions may well fear that legislative or gubernatorial offices may take over the process if the institutions do not cooperate with the statewide board (Folger 1980a).

Statewide boards typically look upon review of existing programs as an excellent mechanism both to demonstrate accountability to the legislature and to help campus leaders deflect some of the "heat" for difficult but warranted decisions (Callan and Jonsen 1980). State boards must be careful, however, not to build unreasonable expectations about the nature of results from the program review process. Program review must be sold to the legislature and state budget offices as a way to ensure vitality and responsiveness and to help institutions live with less money through internal tradeoffs, not as a way to refund money to the state treasury (Callan 1980). State boards are unlikely to face competition from legislative or gubernatorial staffs in regard to in-depth reviews of individual degree programs because the latter staffs will concentrate their attentions elsewhere (Barak and Berdahl 1978).

Institutionwide Focus

Legislative and gubernatorial staffs have a particularly strong interest in evaluating the extent to which institutions are achieving broader institutional objectives with regard to student outcomes and administrative effectiveness (Folger 1977b, 1980a). The primary interests of the two sets of staff are somewhat different, and, therefore, their approaches go in relatively separate directions. The executive budget office pushes to get performance measures that can be directly related to budget allocation, and legislative auditors look at questions of legislative intent and occasionally conduct ad hoc performance evaluations. A few staffers may see possibilities of merging the performance interests of the two groups under rather unusual political conditions, but the gap between the two sets of interests may widen because of differing perspectives, overloaded staffs, and the typical lack of contact between the two staffs (Peterson, Erwin, and Wilson 1977).

The ECS National Task Force on Accountability notes that problem areas include: defining goals clearly and in a manner acceptable to the parties involved, reaching agreement on appropriate measures of progress, winning political support on a continuing basis, and avoiding burdensome and excessive regulation. The Task Force also identifies four steps that states need to keep firmly in mind as they review and reformulate their approaches for public universities to demonstrate their accountability at the broader institutional level. They are: reach agreement on the goals for which higher education is to be held accountable, decide who is responsible for achieving which objectives, reach agreement on a process

that will demonstrate achievement of objectives, and develop a mechanism of reporting to the public, governor, and legislature on the results of the evaluation (Education Commission of the States 1979).

Performance budgets. Performance budgeting is designed to relate budgets and expenditures to specific goals and, thus, to obtain more control over the budgetary process. Performance budgeting fits in the category of rational approaches to budgeting. As suggested earlier, rational budgeting approaches have a somewhat positive effect on shaping and focusing the decision process but have little impact on the final stages of decision making, which are primarily a political negotiation. The analysis in this chapter focuses on the specifics of performance budgeting.

Peterson, Erwin, and Wilson report, on the basis of a 1976 survey, that Hawaii and Washington have the most extensive experience with performance budgeting, that four more states collect and report outcome measures in the budgetary process, and that 10 additional states plus the District of Columbia attempt to use some form of performance indicators in the budgetary process (1977, pp. 3-4). The Hawaii and Washington experiences are more illustrations of complexity than models for other states to follow. After several years, state-level authorities and the institutions in these states were still negotiating appropriate measures and budget structure.

Performance budgeting also lacks political appeal, Peterson, Erwin, and Wilson suggest, because legislators dislike the complexity and volume of information they are provided and find it increasingly difficult to defend the university in their home district. Even when performance budgeting information is available, most legislators rely primarily on traditional budget information. They do this because the breadth of categories that the performance budget information is aggregated into makes it difficult for legislators to identify information about any particular university (Peterson, Erwin, and Wilson 1977).

The ECS National Task Force on Accountability warns that the mechanics of developing a sound performance budgeting plan for public universities are time consuming and politically sensitive. Executive budget offices that pursue such an approach are advised to gain the cooperation of all significant participants early in the process (Education Commission of the States 1979).

Performance audits. A performance audit is an assessment of how effectively an activity or organization achieves its goals and objectives. It is a natural extension of fiscal and management audits, going beyond relatively narrow questions about how funds are used to questions about effectiveness. Generally, performance audits are conducted by special small multi-disciplinary staffs of legislative audit committees or of separate legislative audit agencies (Folger 1977a).

The primary problems with performance audits are difficulties of establishing legislative intent, the lack of appropriate performance indi-

cators, ability to undertake few audits because of limited staff, and the failure, in some instances, to establish clear standards and processes in advance of the audit. Frequently audits have problems of credibility because they rely too heavily on personal assessment by the auditor and fail to balance the positive with the negative (Education Commission of the States 1979; Berdahl 1977).

Berdahl's judgment is that performance audits will have relatively modest impacts and will pose no major problems for higher education as long as most states continue to confine themselves to limited performance audits. Any intensive reviews undertaken will almost surely fail from over-ambition. From his perspective, preconditions for the legislative performance evaluation movement gaining momentum are a stronger sense of internal priorities and greater specification in future legislation of intent and understanding of performance indicators. The statewide board also is able to provide more expertise to legislative staffs than has been called upon in many states (Berdahl 1977).

Performance audit activity might be strengthened by changing its orientation. Berdahl suggests audits of the processes of evaluation in higher education or of the activities of the statewide coordinating board (1977). Along the same lines, Folger suggests that an accountability approach can be operated without developing uniform standards for education in all public universities. Performance audits might then involve an assessment of each institution's achievement of its own goals and objectives. Folger notes that this is the approach taken by the U.S. General Accounting Office, which has been involved in performance auditing longer than any of the states (Folger 1980a). Successful implementation of such a reorientation requires that institutions develop clearer statements of institutional goals and objectives than have typically existed and can be facilitated and coordinated by the statewide board (Millard 1977).

Condition of education reports. The Education Commission of the States emphasizes that a major state concern about any accountability approach is public reporting of evaluative information so that responsible officials at both the institutional and state levels have an opportunity to review and comment on both the good and bad news (1980). Condition of education reports are one means to maintain good communication between institutional leaders and state-level authorities. As of 1980, the federal government has produced a national condition of education report for five years and several states also have issued such reports. The state reports include largely quantitative indicators of cost, programs, outputs, and types of students served and, thereby, can show in a general way how higher education is doing. The choice of appropriate indicators is largely an institutional and statewide board responsibility (Folger 1980a). The National Center for Higher Education Management Systems is developing a comprehensive set of indicators that should yield information useful to decision makers at the institutional, state, and federal levels (Lawrence 1979).

Accreditation. The higher education community generally has looked to voluntary accreditation by regional accrediting associations as the primary means to provide public assurance of quality of universities as whole entities. Although the states have great respect for the professionalism of the accreditation review process, they do not believe that voluntary accreditation, as it has been carried out historically, can be a major element in a state accountability process. They have this belief for two major reasons—lack of public reporting and control of the process by the institutions accredited (Education Commission of the States 1979). Harclerod outlines a six-step process of "educational auditing" that the regional accrediting bodies could follow to add more financial elements to the accreditation process and to provide for public reporting. He recommends that a short form report prepared by the institution and the formal short-form report of the educational auditing team be published in the institution's catalog and distributed to the public (Harclerod 1980).

Alternative state roles in accreditation include states carrying on their own accreditation activity or relating themselves in some relatively direct fashion to voluntary accreditation. With regard to the former, as of 1978 state boards in 14 states were explicitly authorized by constitutional inclusion or legislative enactment to accredit institutions within their jurisdiction (Birch 1979, p. 173).

Encouraging steps are being taken to relate accrediting agencies and statewide higher education boards more directly. For example, the Southern Association of Colleges and Schools hosts an advisory group of officers of statewide boards (Bogue 1980). A model for a more direct linkage between a statewide board and a regional accrediting body has been developed by the Maryland State Board for Higher Education and the Middle States Association of Colleges and Schools. The Maryland State Board has developed a highly detailed process for institutional evaluation for public universities that is tied to budget development and presentation of annual funding requests to the legislature. A 1979 agreement between the Maryland State Board and the Middle States Association provides very specific ways in which the voluntary accrediting process will be integrated into and supplement the Board institutional evaluation process. Elements in the agreement call for submission of self-study reports to both the Board and Association, the assignment of three evaluation team members by the Board at the time the on-site visit is made, separate visitation reports prepared by two sets of members to be shared after completion, and a follow-up report to the Board after five years to show action taken on report recommendations (Harclerod 1980).

Statewide Board Focus

Not only does the statewide board play a significant role in the accountability approaches of most states but it also may be subject to evaluation in terms of performance of its assigned functions in meeting statewide higher education goals.

Evaluations of the statewide board may be conducted on a periodic or

ad hoc basis. As of 1980 Alabama was the only state that legislatively mandates a periodic review of the statewide board (Education Commission of the States 1980). Ad hoc reviews in some other states have occurred when the accumulation of complaints about the board seem to justify them. French and Berdahl argue for periodic review as more in tune with the regular assessments typically expected of any accountability approach. After one periodic cycle is completed, the statewide board, with its knowledge of existing criteria, can also accumulate relevant information for the next evaluation (French and Berdahl 1980).

Possible review methods include self-review as well as evaluation by legislative audit agencies, special gubernatorially or legislatively appointed commissions, and by consultants. French and Berdahl urge that the process of evaluation chosen in any particular state reflect sensitivity to the strengths and weaknesses of various mechanisms as well as to the peculiarities of political conditions. They find that patterns, such as that in Florida, combining a number of the approaches are likely to be especially balanced and beneficial for the state (French and Berdahl 1980).

As with other accountability approaches, one of the crucial problems is the type of criteria that should be applied. The 1979 Alabama report indicates that its assessment focused both on the effectiveness of the board in "discharging its assigned responsibilities with its assigned powers" and the board's probable future effectiveness "in the face of the particular conditions and problems facing higher education in that state" (*Alabama's Challenge* 1979, p. 61). The Alabama report emphasizes that there can never be an ideal national model because states vary in legal mandates and general circumstances. French and Berdahl provide a composite set of criteria used in various states that includes previous evaluation, board membership, board staff, original legislation, sensitivity to the political scene, relationships to postsecondary institutions, planning process, program review process, budgeting process, and reports and studies (1980).

Miller suggests that more attention be given to political criteria for board effectiveness and that boards ultimately must be evaluated on the extent to which they actually influence educational policy making (1975). French and Berdahl remain somewhat uncomfortable, however, with assigning either credit or blame to the statewide board for achievement or nonachievement of goals because of the intervening variables involved and suggest continued work on this problem at both the practical and conceptual levels (1980).

Private Universities

Private universities can anticipate that state-level authorities increasingly will expect that they demonstrate their accountability to the state. This increased demand for effective performance will arise out of both the public function served by the nonpublic sector and its greater governmental support (Jonsen 1980).

In the past, most of state attention to the private sector focused on establishing minimum standards for institutional licensure or authori-

zation. As of 1979, 36 states licensed degree-granting institutions (Education Commission of the States 1979).

State accountability expectations for private universities can be expected to go considerably beyond meeting the standards of institutional licensing. The National Task Force on Accountability indicates that it does not regard institutional licensure as a substitute for an accountability process. Licensure is a minimum prerequisite, but it does not measure programmatic effectiveness (Education Commission of the States 1979). Jonsen notes that although there is little consensus as to the meaning of accountability for the private sector at this time, it can be expected that such a consensus will slowly evolve in the coming years. That meaning needs to be worked out in a manner that is sensitive to and balances the needs of both the states and the institutions and through a process that invites much institutional participation (Jonsen 1980).

Concluding Comments

The specific approaches to accountability and the relative roles of institutions and state-level authorities will vary among states and over time. No consensus exists at this time on the appropriate role of institutions in evaluative activity connected with the demonstration of accountability. Among state-level authorities, the statewide board typically focuses primarily on the review of specific degree programs. When the focus is institutionwide objectives, all state-level authorities may be involved, with the initiative frequently taken by legislative or gubernatorial staffs.

Given the fluid state of accountability patterns, research in a number of areas would be helpful. These include specific forms in which accountability demands are made upon universities, differing impact on campuses of the various specific forms, and effects of various political environments upon the specific accountability demands made and their impact upon institutions (Hartmark 1978).

Both statewide boards and institutions need to give greater attention to the statewide board role in accountability approaches focused at the institutionwide level in order to increase the sensitivity of these approaches to campus-level concerns. Accountability approaches designed and administered by statewide boards are more likely to give weight to campus-level perspectives than those for which primary leadership has been provided by legislative or gubernatorial staffs (Folger 1977b).

A positive institutional stance increases the probability of campus influence on the specifics of accountability measures and of winning state-level understanding of their limitations. Folger (1977b) and Millard (1977) advise institutions who are critical of performance measures proposed by state-level authorities to suggest refinements or possible alternatives to minimize the likelihood of less helpful answers being provided by others. Once responding to state-level accountability demands has been put in a positive context, Hines and Wiles suggest the importance of negating the illusion that accountability can or should be complete. Exhaustive knowledge of extremely complex and constantly changing phenomena is simply

not possible. Universities must, therefore, work hard "to legitimate the necessary *fuzziness* of their organizational life" (Hines and Wiles 1980, p. 306).

Future Challenges

This last chapter notes environmental uncertainties that influence state policy making and provides a brief analysis of two major challenges facing higher education.

Coping with Environmental Uncertainties

State higher education policy is made in an extremely complex environment that is likely to become more problematic during the remainder of the 1980s and 1990s. Political, economic, and philosophical factors will all contribute to instability and unpredictability and will make it more difficult for the statewide board to exercise leadership.

The development of new planning and accountability approaches is likely to be handicapped by the absence of a stable set of expectations between state government and higher education institutions. Policy approaches change in some states with each new gubernatorial administration or legislative session. The structure and powers of the statewide board also are altered frequently in a few states (Folger 1980a). Some direct legislative or gubernatorial interventions into areas always assumed to be the province of the statewide board also have been noted in a few states (Millard 1980).

Midyear gubernatorial decisions in higher education budgets, reported during late 1981 and 1982 in a number of major industrial states, have sensitized universities to the unpredictability of economic conditions and, therefore, of state revenue levels (*The Effect on Higher Education of State Actions in Response to Unanticipated Revenue Shortfalls* 1982). As a result, both state-level authorities and institutions are beginning to plan and budget with state revenue uncertainties more clearly in mind. When mid-year decisions occur, the statewide board faces an especially challenging situation for exercising its leadership (Furman 1981, Glenny 1982).

Increasing ambivalence is likely concerning the appropriate mix between regulatory and free-market aspects of state policy toward higher education. Regulation in general is very much out of favor now at the national level under the Reagan administration and is not especially popular in most states. The political debate on regulation in higher education at the federal level is well underway (Finn 1981), and strengths and weaknesses of the market model in the state policy-making arena also have been explored (Breneman 1981, Weathersby 1980, Thompson and Zumeta 1980). Questions about the usefulness of statewide boards during a period of retrenchment are being debated because it is much more difficult to regulate patterns of decline than of growth (Elliott 1982, Johnson 1982, Browne 1982).

Maintaining Quality and Access

In the most basic terms, the primary challenges for state higher education policy are maintaining the quality of educational services and providing access to all students who might benefit. Such preservation will be extremely difficult during a period likely to be marked by a number of financial stringencies.

Maintaining the quality of educational services requires the full commitment of both institutional and statewide board leaders. They must be committed to the priority allocation of resources to areas acknowledged to be of high programmatic priority and to the phasedown or phaseout of some areas less central to institutional scope and mission. Such commitment provides a strong counterweight to a variety of political forces, both internal to campuses and in the state political arena, that push for both funding increments and decrements to be handled on an across-the-board basis. Program review at both the institutional and state levels helps foster programmatic renewal and vitality and provides insights into resource allocation and reallocation necessities.

Maintaining quality in a period of declining enrollment will require that states set total higher education funding at a level and allocate funding among the various public institutions in a way that recognizes a realistic configuration of fixed and variable costs and does not encourage excessive competition for enrollment within the public sector or with private institutions. Unfortunately, many states may find themselves with little discretionary leeway in setting the total for higher education during the mid-1980s in the absence of a rapid economic recovery, increased public willingness to pay higher taxes, or restoration of earlier levels of state revenue from federal sources.

Ensuring student access to an institution of choice is likely to be especially difficult as tuition in both the public and private sectors increases more rapidly than available federal student financial assistance or state revenues. Equity issues related to eligibility and allocation of state student financial assistance will inevitably become more complex as overall student needs increase and the portion of these needs that can be met through federal sources decreases.

The challenge facing state-level authorities in equitably rationing state student financial assistance will be complicated by recognition of the indirect but pronounced impact that such assistance has upon the financial health of institutions in both the private and public sectors. State-level authorities can anticipate strong pressures on such matters from both sectors with the intensity from the public sector increasing along with the portion of total public university revenue that must be derived from tuition.

Bibliography

The ERIC Clearinghouse on Higher Education abstracts and indexes the current literature on higher education for the National Institute of Education's monthly bibliographic journal *Resources in Education*. Many of these publications are available through the ERIC Document Reproduction Service (EDRS). Publications cited in this bibliography that are available from EDRS include the ordering number and price at the end of the citation. To order a publication, write to EDRS, P.O. Box 190, Arlington, Virginia 22210. When ordering, please specify the document number. Documents are available as noted in microfiche (MF) and paper copy (PC).

Adamany, David. "Government, Quality Programs and Effective Resource Use in Higher Education." Paper presented at Annual Academic Planning Conference, June 1979, at the University of Southern California. ED 176 690 MF-\$1 11, PC-\$5 14

Alabama's Challenge. *Higher Education for the 1980's*. Report of the Second Committee to Evaluate the Effectiveness of the Alabama Commission on Higher Education. Montgomery: Alabama Commission on Higher Education, March 1979. ED 169 823 MF-\$1 11, PC-\$6 79

Allen, Richard H. "A Preliminary Report on the National Survey of State Resource Allocation." In *Financing and Budgeting Higher Education in the 1980's*, edited by Larry L. Leslie and Heather L. Otto. Tucson: Center for the Study of Higher Education, University of Arizona, 1980. ED 197 668 MF-\$1 11, PC-\$8 81

Allen, Richard H., and Topping, James R., eds. *Cost Information and Formula Fund- ing. New Approaches*. Boulder, Colo.: National Center for Higher Education Man- agement Systems, 1979. ED 183 057. MF-\$1 11; PC-\$8.81

Ashworth, Kenneth. "State Coordination and External Degree Programs." *Peabody Journal of Education* 56 (April 1979): 195-200.

Barak, Robert J. "Program Evaluation as a Tool for Retrenchment." In *Challenges of Retrenchment*, edited by James R. Mingle. San Francisco: Jossey-Bass, 1981.

Barak, Robert J., and Berdahl, Robert O. *State-Level Academic Program Review in Higher Education*. Report No. 107. Denver: Education Commission of the States, February 1978. ED 158 638 MF-\$1 11; PC-\$12.11

Berdahl, Robert O. *Statewide Coordination of Higher Education*. Washington, D.C.: American Council on Education, 1971.

———. ed. *Evaluating Statewide Boards*. New Directions for Institutional Research, No. 5. San Francisco: Jossey-Bass, 1975.

———. "Legislative Program Evaluation." In *Increasing the Public Accountability of Higher Education*, edited by John K. Folger. New Directions for Institutional Research, No. 16. San Francisco: Jossey-Bass, 1977.

———. "The Politics of State Aid." In *Public Policy and Private Higher Education*, edited by David W. Breneman and Chester E. Finn. Washington, D.C.: Brookings Institution, 1978.

Berdahl, Robert O., and Gove, Samuel K. "Governing Higher Education: Faculty Roles on State Boards." *AAUP Bulletin* 68 (May/June 1982): 21-24.

Birch, Garnet E. "State Higher Education Agency Responsibility for the Evaluation and Accreditation of Public Four-Year Institutions of Higher Education." Doctoral dissertation, University of Arizona, 1979.

Bogue, E. Grady. "State Agency Approaches to Academic Program Evaluation." In *Academic Program Evaluation*, edited by Eugene C. Craven. New Directions for Institutional Research, No. 27. San Francisco: Jossey-Bass, 1980.

Bogue, E. Grady, and Troutt, William. *Allocation of State Funds on a Performance Criterion: The Performance Funding Project of the Tennessee Higher Education Commission*. Nashville: Tennessee Higher Education Commission, 1980.

Bowen, Frank M., Edelstein, Stewart, and Medsker, Leland. "The Identification of Decision Makers Concerned with Nontraditional Degree Programs and an Analysis of Their Information Needs." In *An Evaluative Look at Nontraditional Postsecondary Education*, edited by Charles B. Stallford. Berkeley: Center for Research and Development in Higher Education, University of California, 1976. ED 176 106. MF-\$1.11, PC-\$15.78.

Bowen, Frank M., and Glenn, Lyman A. *State Budgeting for Higher Education: State Fiscal Stringency and Public Higher Education*. Berkeley: Center for Research and Development in Higher Education, University of California at Berkeley, 1976. ED 159 978. MF-\$1.11, PC-\$22.74.

———. Enrollment Management. In *Challenges of Retrenchment*, edited by James R. Mingle. San Francisco: Jossey-Bass, 1981a.

———. Quality and Accountability: An Evaluation of Statewide Program Review Procedures. Sacramento: California Postsecondary Education Commission, 1981b. ED 200 156. MF-\$1.11, PC-\$12.11.

Breneman, David W. "Strategies for the 1980s." In *Challenges of Retrenchment*, edited by James R. Mingle. San Francisco: Jossey-Bass, 1981.

Breneman, David W., and Finn, Chester E. "An Agenda for the Eighties." In *Public Policy and Private Higher Education*, edited by David W. Breneman and Chester E. Finn. Washington, D.C.: Brookings Institution, 1978a.

———. "An Uncertain Future." In *Public Policy and Private Higher Education*, edited by David W. Breneman and Chester E. Finn. Washington, D.C.: Brookings Institution, 1978b.

Browne, A. D. Letter to the Editor. *Chronicle of Higher Education*, 17 February 1982, p. 33.

Brayson, Charles H., and Posey, Ellen L. "Statewide Data Systems: Some Policy Questions in an Era of Financial Retrenchment." *CAUSE EFFECT* 3 (July 1980): 18-23.

California Postsecondary Education Commission. *Degrees of Diversity: Off-Campus Education in California*. Sacramento: California Postsecondary Education Commission, March 1980. ED 190 004. MF-\$1.11, PC-\$17.43.

Callan, Patrick M. "The Challenge to Program Reviewers." In *Postsecondary Education Program Review*, edited by Richard Jonsen and Roger Bassett. Boulder, Colo.: Western Interstate Commission for Higher Education, 1980. ED 184 486. MF-\$1.11; PC-\$12.48.

Callan, Patrick M., and Jonsen, Richard W. "Trends in Statewide Planning and Coordination." *Educational Record* 61 (Summer 1980): 50-53.

Carnegie Commission on Higher Education. *The Capitol and the Campus: State Responsibility for Higher Education*. New York: McGraw-Hill, 1971.

———. *Governance of Higher Education: Six Priority Problems*. New York: McGraw-Hill, 1973.

Carnegie Council on Policy Studies in Higher Education. *The States and Private Higher Education: Problem and Policies in a New Era*. San Francisco: Jossey-Bass, 1977.

———. *Fair Practices in Higher Education: Rights and Responsibilities of Students and Their Colleges in a Period of Intensified Competition for Enrollments*. San Francisco: Jossey-Bass, 1979.

———. *Three Thousand Futures: The Next Twenty Years for Higher Education*. San Francisco: Jossey-Bass, 1980. ED 183 076. MF-\$1.11, PC not available. EDRS.

Carnegie Foundation for the Advancement of Teaching. *The States and Higher Education: A Proud Past and a Vital Future*. San Francisco: Jossey-Bass, 1976. ED 127 899. MF-\$1.11, PC not available. EDRS.

Caruthers, J. Kent. "Relating Role and Mission to Program Review." In *Postsecondary Education Program Review*, edited by Richard Jonsen and Roger Bassett. Boulder, Colo.: Western-Interstate Commission for Higher Education, 1980. ED 184 486. MF-\$1.11, PC-\$12.11.

Caruthers, J. Kent, and Lott, Gary. *Mission Review: Foundation for Strategic Planning*. Boulder, Colo.: National Center for Higher Education Management Systems, 1981. ED 208 757. MF-\$1.11, PC-\$15.78.

Caruthers, J. Kent, and Orwig, Melvin. *Budgeting in Higher Education*. AAHE-ERIC Higher Education Research Report No. 3, 1979. Washington, D.C.: American Association for Higher Education, 1979. ED 169 875. MF-\$1.11, PC-\$10.46.

Chance, William. "Levels of Program Review: State." In *Postsecondary Education Program Review*, edited by Richard Jonsen and Roger Bassett. Boulder, Colo.: Western Interstate Commission for Higher Education, 1980. ED 184 486. MF-\$1.11, PC-\$12.11.

Chromister, Jay, and others. *Independent College and University Participation in State-wide Planning for Postsecondary Education*. Washington, D.C.: National Institute of Independent Colleges and Universities, 1978. ED 165 684. MF-\$1.11, PC-\$6.79.

Crosson, Patricia H. *Pennsylvania Postsecondary Education Policy Systems: Coping with Enrollment and Resource Declines*. Pittsburgh: Institute for Higher Education, University of Pittsburgh, 1981. ED 202 428. MF-\$1.11, PC-\$10.46.

Dressel, Paul R. "Balancing Responsibility, Autonomy, and Accountability." In *The Autonomy of Public Colleges*, edited by Paul R. Dressel. New Directions for Institutional Research, No. 26. San Francisco: Jossey-Bass, 1980.

Dumont, Richard G. "Performance Funding and Power Relations in Higher Education." *Journal of Higher Education* 51 (July-August 1980):400-23.

Education Commission of the States. *Coordination or Chaos: Report of the Task Force on Coordination, Governance and Structure of Post-Secondary Education*. Report No. 143. Denver: Education Commission of the States, October 1973. ED 093 239. MF-\$1.11, PC-\$10.46.

———. *Accountability and Academic: Report of the National Task Force on the Accountability of Higher Education to the State*. Report No. 126. Denver: Education Commission of the States, July 1979.

———. *Challenge: Coordination and Governance in the '80s*. Report No. 134. Denver: Education Commission of the States, July 1980. ED 194 019. MF-\$1.11, PC-\$10.46.

———. *State Postsecondary Education Profiles Handbook—1981 Edition*. Report No. 88. Denver: Education Commission of the States, December 1981. HE 014 967. MF-\$1.11, PC not available EDRS.

The Effect on Higher Education of State Actions in Response to Unanticipated Revenue Shortfalls. A report of a survey initiated by the Washington Council for Higher Education and responded to by the State Higher Education Executive Officers. Edited by John R. Wittstruck. Boulder, Colo.: SHEEO/NCES Communication Network, April 1982. HE 015 148. MF-\$1.11, PC-\$6.79.

Elliott, Loretta G. "Facilitating Pervasive Planning: The State Perspective," Appended to Mims, R. Sue. "Facilitating Pervasive Planning: Multi-Level Institutional Planning." Paper presented at Annual Forum, Association for Institutional Research, May 1979, in San Diego. ED 174 127. MF-\$1.11, PC-\$5.14.

Elliott, Peggy. "Are Coordinating Boards Needed Anymore?" *Chronicle of Higher Education*, 13 January 1982, p. 64.

Emerson, Harold L. "The Uses and Abuses of Cost Information." In *Cost Information and Formula Funding: New Approaches*, edited by Richard H. Allen and James R. Topping. Boulder, Colo.: National Center for Higher Education Management

- Systems. 1979. ED 183 057. MF-\$1.11. PC-\$8.81
- Engdahl, Lilla, and Barak, Robert. "Study of Academic Program Review." In *Postsecondary Education Program Review*, edited by Richard Jonsen and Roger Bassett. Boulder, Colo.: Western Interstate Commission for Higher Education, 1980. ED 184 486. MF-\$1.11. PC-\$14.13
- Exo, Warren D. "Reconciling State Plans and University Planning: A Mandate for Higher Education." Paper presented at the Annual Conference, Society for College and University Planning, August 1977, in Seattle
- Finn, Chester E., Jr. "Toward A New Consensus." *Change* 13 (September 1981): 17-21. 60-63
- Folger, John K. "Editor's Notes." In *Increasing the Public Accountability of Higher Education*, edited by John K. Folger. New Directions for Institutional Research, No. 16. San Francisco: Jossey-Bass, 1977a
- . "Suggestions for the Future." In *Increasing the Public Accountability of Higher Education*, edited by John K. Folger. New Directions for Institutional Research, No. 16. San Francisco: Jossey-Bass, 1977b.
- . "Implications of State Government Changes." In *Improving Academic Management*, edited by Paul Jedamus and Marvin W. Peterson. San Francisco: Jossey-Bass, 1980a.
- . "Workshop Overview." In *Postsecondary Education Program Review*, edited by Richard Jonsen and Roger Bassett. Boulder, Colo.: Western Interstate Commission for Higher Education, 1980b. ED 184 486. MF-\$1.11. PC-\$14.13
- French, Elizabeth, and Berdahl, Robert O. *Who Guards the Guardians? The Evaluation of Statewide Boards of Higher Education*. Occasional Paper Series, No. 7. Buffalo: Department of Higher Education, State University of New York at Buffalo; August 1980. ED 196 327. MF-\$1.11. PC-\$8.81
- Furman, James. "The Integration of Fiscal and Academic Planning." In *Financing and Budgeting Postsecondary Education in the 1980's*, edited by Larry L. Leslie and Heather L. Otto. Tuscon: Center for the Study of Higher Education, University of Arizona, 1980. ED 197 668. MF-\$1.11. PC-\$8.81.
- . "State Budgeting and Retrenchment." In *Challenges of Retrenchment*, edited by James R. Mingle. San Francisco: Jossey-Bass, 1981.
- Glenny, Lyman A. *Autonomy of Public Colleges. The Challenge of Coordination*. New York: McGraw-Hill, 1959
- . *State Budgeting for Higher Education. Interagency Conflict and Consensus*. Berkeley: Center for Research and Development in Higher Education, University of California at Berkeley, 1976a. ED 132 940. MF-\$1.11. PC-\$15.78.
- . "State Control and Programs for Higher Education." In *Budgeting for Higher Education and the Legislative Oversight Process*. Atlanta: Southern Regional Education Board, 1976b. ED 167 047. MF-\$1.11. PC-\$5.14.
- . "Financing Higher Education in the 1980s. Fewer Students, More Dollars?" In *Higher Education Perspectives '78*. Atlanta: Southern Regional Education Board, 1978. ED 165 562. MF-\$1.11. PC-\$6.79.
- . "Decision-Making in Panic Time." *AGB Reports* 24 (May/June 1982): 20-24.
- Glenny, Lyman A., and Bowen, Frank M. *State Intervention in Higher Education*. Report Prepared for the Sloan Commission on Government and Higher Education, Cambridge, Mass.: Sloan Commission on Government and Higher Education, November 1977. ED 184 427. MF-\$1.11. PC-\$11.46.
- Glenny, Lyman A., and Schmidlein, Frank A. *The Role of the State in the Governance of Higher Education*. Palo Alto, Calif.: Institute for Research on Educational Finance and Governance, Stanford University, 1980. ED 194 996. MF-\$1.11. PC-\$6.79.

Gove, Samuel K., and Floyd, Carol E. "Research on Higher Education Administration and Policy: An Uneven Report." *Public Administration Review* 35 (January-February 1975):111-18.

Green, Kenneth C. "Program Review and the State Responsibility for Higher Education." *Journal of Higher Education* 52 (January-February 1981) 67-80.

Gross, Francis M. *A Comparative Analysis of the Existing Budget Formulas Used for Justifying Budget Requests or Allocating Funds for the Operating Expenses of State-Supported Colleges and Universities*. Monograph No. 9. Knoxville: Office of Institutional Research, University of Tennessee, December 1973. ED 168 409 MF-\$1.11; PC-\$14.13.

Formula Budgeting and the Financing of Public Higher Education: Panacea or Nemesis for the 1980s." *AIR (Association for Institutional Research) Professional File*, No. 3. Inserted in *AIR Newsletter*, Fall 1979. ED 178 004 MF-\$1.11; PC-\$3.49.

Groves, Roderick T. "Program Review in a Multi-Level State Governance System: The Case of Illinois." *Planning for Higher Education* 8 (Fall 1979) 1-9.

Harcleroad, Fred F. *Accreditation: History, Process, and Problems*. AAHE-ERIC Higher Education Research Report No. 6, 1980. Washington, D.C.: American Association for Higher Education, 1980. ED 198 774. MF-\$1.11; PC-\$6.79.

Hartmark, Leif S. "The Effects of Rationalistic Budgeting and Legislative Staff upon University Policy-Making Independence: The Wisconsin Experience." Ph.D. dissertation, State University of New York at Albany, 1978.

Hawk, Richard C. "Implications of Regionalism for State-Level Planning and Coordinating Efforts for Postsecondary Education." In *Study Talk and Action: A Report of a National Conference on Regionalism and Regionalization in American Postsecondary Education*, edited by S. V. Martorana and Lawrence A. Nespoli. University Park: Center for the Study of Higher Education, Pennsylvania State University, September 1978. ED 165 602. MF-\$1.11; PC-\$10.46.

Hines, Edward R. "Assessing Quality and Excellence in Higher Education: The Mutually Complementary Roles of Campus and State." Paper presented at Annual Meeting, North East Association for Institutional Research, October-November 1980, in Amherst, Mass.

Hines, Edward R., and Hartmark, Leif S. *Politics of Higher Education*. AAHE-ERIC Higher Education Research Report No. 7, 1980. Washington, D.C.: American Association for Higher Education, 1980. ED 201 263. MF-\$1.11; PC-\$8.81.

Hines, Edward R., and Wiles, David K. "Commentary: The Pendulum Dynamics of Accountability in Higher Education." *College and University* 55 (Spring 1980):302-08.

Holderman, James B. "Perspectives of a One-Time Coordinator." In *Evaluating Statewide Boards*, edited by Robert O. Berdahl. New Directions for Institutional Research, No. 5. San Francisco: Jossey-Bass, 1975.

Hullander, T. Edward. "The Impact of Enrollment Trends on the Role of State Coordinating Boards," 1978. ED 157 492. MF-\$1.11; PC-\$5.14.

Holmer, Freeman, and Bloomfield, Stefan D. "A Resource/Acquisition Model for a State System of Higher Education." *Planning for Higher Education* 5 (October 1976):4-5.

Illinois Board of Higher Education. *Fiscal Year 1982 Budget Recommendations*. Springfield: Illinois Board of Higher Education, January 1981. HE 015 226 MF-\$1.11; PC-\$10.46.

Johnson, Mark D. Letter to the Editor. *Chronicle of Higher Education*, 17 February 1982, p. 33.

Jonsen, Richard W. *State Policy Issues Affecting Independent Higher Education*.

- Washington, D.C. National Institute of Independent Colleges and Universities, 1980 ED 190 013 MF-\$1.11, PC-\$5.14
- Jonsen, Richard W., with Bogue, E. Grady, and Chambers, Gail S. "Public Policy Toward Private College Distress." In *Challenges of Retrenchment*, edited by James R. Mingle. San Francisco: Jossey-Bass, 1981.
- Lawrence, Ben. "Accountability Information: Progress, Pitfalls, and Potential." In *Preparing for the New Decade*, edited by Larry W. Jones and Franz A. Nowotny. New Directions for Higher Education, No. 28. San Francisco: Jossey-Bass, 1979.
- Leslie, Larry L. "The Financial Prospects for Higher Education in the '80s." In *Financing Postsecondary Education in the 1980s*, edited by Fred F. Hartlewood. Tucson: Center for the Study of Higher Education, University of Arizona, August 1979. ED 181 778 MF-\$1.11, PC-\$12.01
- Leslie, Larry L., and Hyatt, James, eds. *Higher Education Financing Policies: State Institutions and Their Interaction*. Tucson: Center for the Study of Higher Education, University of Arizona, October 1981. HE 014 968 MF-\$1.11, PC not available EDRS
- Lingenfelter, Paul E. "The Politics of Higher Education Appropriations in Three Midwestern States." Ph.D. dissertation, University of Michigan, 1974.
- Linhart, Cynthia A., and Yeager, John L. *A Review of Selected State Budget Formulas for the Support of Postsecondary Educational Institutions*. Pittsburgh, Pa.: Office of University Planning, University of Pittsburgh, 1978. ED 154 685. MF-\$1.11, PC-\$10.46
- Martorana, S. V., and Kuhns, Eileen. "Using Comparative Indices of Academic Programs in Institutional, Regional, and State-Level Planning and Decision Making: Evolution of a Model." Paper presented at Annual Forum, Association for Institutional Research, April 1980, in Atlanta. ED 189 925. MF-\$1.11, PC-\$3.49
- Martorana, S. V., and Nespoli, Lawrence A. "Regionalism in American Postsecondary Education: Concepts and Practices." In *Study, Talk and Action: A Report of a National Conference on Regionalism and Regionalization in American Postsecondary Education*, edited by S. V. Martorana and Lawrence A. Nespoli. University Park: Center for the Study of Higher Education, Pennsylvania State University, 1978. ED 165 602 MF-\$1.11, PC-\$10.46.
- McTarnaghan, Roy. "State Financing of Quality Improvement: A Reassessment of Florida's University System." Paper presented at the National Conference on Higher Education, American Association for Higher Education, March 1980, in Washington, D.C.
- Meisinger, Richard J. *State Budgeting for Higher Education. The Uses of Formulas*. Berkeley: Center for Research and Development in Higher Education, University of California at Berkeley, 1976. ED 132 963 MF-\$1.11; PC-\$22.74.
- Melchiori, Gerlinda S. "Pattern of Program Discontinuance: A Comparative Analysis of State Agency Procedures for Initiating and Implementing the Discontinuance of Academic Programs." Research Report. Ann Arbor: Center for the Study of Higher Education, University of Michigan, 1980.
- . "Coping with Curricular Change in Academe." *AIR (Association for Institutional Research Professional File*, No. 11. Inserted in *AIR Newsletter*, Spring 1981. ED 207 436 MF-\$1.11; PC-\$3.49.
- Michigan Department of Education. *Formula Funding Mechanisms for State Support of Public Colleges and Universities Across the Nation*. Lansing: Michigan Department of Education, 1976. ED 131 744. MF-\$1.11; PC-\$6.79.
- Millard, Richard M. *State Boards of Higher Education*. AAHE-ERIC Higher Education Research Report No. 4, 1976. Washington, D.C.: American Association

- for Higher Education, 1976. ED 129 196. MF-\$1.11; PC-\$8.81
- . "Reconciling Statewide Priorities and Institutional Aspirations." Paper presented at a Seminar for State Leaders in Postsecondary Education, November 1977, in Dearborn, Mich. Education Commission of the States Inservice Education Program—State Higher Education Executive Officers Association. ED 202 317. MF-\$1.11; PC-\$3.49.
- . "Power of State Coordinating Agencies." In *Improving Academic Management*, edited by Paul Jedamus and Marvin W. Peterson. San Francisco: Jossey-Bass, 1980.
- Miller, James L., Jr. *State Budgeting for Higher Education: The Use of Formulas and Cost Analysis*. Ann Arbor: Institute of Public Administration, University of Michigan, 1964.
- . "Evaluation and Political Reality." In *Evaluating Statewide Boards*, edited by Robert O. Berdahl. New Directions for Institutional Research, No. 5. San Francisco: Jossey-Bass, 1975.
- Millett, John D. *The Budget Formula as the Basis for State Appropriations in Support of Higher Education*. New York: Management Division, Academy for Educational Development, Inc., 1974. ED 098 850. MF-\$1.11; PC-\$6.79.
- . "Statewide Coordinating Boards and Statewide Governing Boards." In *Evaluating Statewide Boards*, edited by Robert O. Berdahl. New Directions for Institutional Research, No. 5. San Francisco: Jossey-Bass, 1975.
- Mingle, James R. "Planning for Statewide Program Approval and Review." *Issues in Higher Education*, No. 11. Atlanta: Southern Regional Education Board, 1977. ED 142 153. MF-\$1.11; PC-\$3.49.
- . "Influencing Academic Outcomes: The Power and Impact of Statewide Program Review." In *The Closing System of Academic Employment*. Atlanta: Southern Regional Education Board, 1978a. ED 160 032. MF-\$1.11; PC-\$8.81.
- . "State Regulation of Off-Campus Programs and Out-of-State Institutions." *Issues in Higher Education*, No. 12. Atlanta: Southern Regional Education Board, 1978b. ED 153 526. MF-\$1.11; PC-\$3.49.
- . "Choices Facing Higher Education in the 1980s." In *Challenges of Retrenchment*, edited by James R. Mingle. San Francisco: Jossey-Bass, 1981.
- Mingle, James R., Berdahl, Robert O., and Peterson, Marvin W. "Political Realities of Statewide Reorganization, Merger, and Closure." In *Challenges of Retrenchment*, edited by James R. Mingle. San Francisco: Jossey-Bass, 1981.
- Monical, David G., and Shoenecker, Craig V. "Marginal Funding: A Difference That Makes A Difference?" Paper presented at Annual Forum, Association for Institutional Research, May 1979, in San Diego. ED 174 074. MF-\$1.11; PC-\$5.18.
- Morgan, Anthony W. "Resource Allocation Reforms: Zero Base Budgeting and Marginal Utility Analysis in Higher Education." Paper presented at Annual Meeting, Association for the Study of Higher Education, March 1978, in Chicago. ED 157 410. MF-\$1.11; PC-\$5.14.
- . "Budgeting Approaches in the 1980s: Looking for Mr. Goodbar." In *Financing Postsecondary Education in the 1980s*, edited by Fred F. Hartclerod. Tuscon: Center for the Study of Higher Education, University of Arizona, 1979. ED 181 778. MF-\$1.11; PC-\$12.11.
- Mortimer, Kenneth P., and McConnell, T. R. *Sharing Authority Effectively*. San Francisco: Jossey-Bass, 1978.
- Mortimer, Kenneth P., and Tierney, Michael L. *The Three "R's" of the Eighties: Reduction, Reallocation, and Retrenchment*. AAHE-ERIC Higher Education Research Report No. 4, 1979. Washington, D.C.: American Association for Higher Education, 1979. ED 172 642. MF-\$1.11; PC-\$8.81.

- Moss, Charles E. and Gartner, Gerald H. "Formula Budgeting: Requiem, or Renaissance?" *Journal of Higher Education* 47 (September-October 1976) 543-63.
- Mumper, Michael J. Faculty Advisory Committees to Statewide Higher Education Agencies: An Examination of Their Roles and Contributions in States with Coordinating Boards. Mimeographed. College Park: Department of Government and Politics, University of Maryland, September 1981.
- Odell, Morgan, and Thelin, John. Bringing the Private Sector into Statewide Higher Education Planning. *Policy Studies Journal*, 10 (Autumn 1981) 59-70.
- O'Neill, Joseph P. "State Role in Private College Closings." In *Challenges of Retrenchment*, edited by James R. Mingle. San Francisco: Jossey-Bass, 1984.
- Peterson, Mary W., Erwin, Michael J., and Wilson, Richard. "State-level Performance Budgeting." In *Increasing the Public Accountability of Higher Education*, edited by John K. Folger. New Directions for Institutional Research, No. 16. San Francisco: Jossey-Bass, 1977.
- Purves, Ralph A., and Glenn, Lyman A. *State Budgeting for Higher Education: Information Systems and Technical Analysis*. Berkeley: Center for Research and Development in Higher Education, University of California at Berkeley, 1976. ED 134 114. MF-\$1.11. PC.
- Schmidt, Frank A. "Information Systems and Concepts of Higher Education Governance." In *Appraising Information Needs of Decision Makers*, edited by Carl R. Adams. New Directions for Institutional Research, No. 15. San Francisco: Jossey-Bass, 1977.
- Schmidt, Frank A., and Glenn, Lyman A. *State Budgeting for Higher Education: The Political Economy of the Process*. Berkeley: Center for Research and Development in Higher Education, University of California at Berkeley, 1976. ED 138 171. MF-\$1.11. PC-\$22.74.
- Skubal, Jacqueline M. "State-Level Review of Existing Academic Programs: Have Resources Been Saved? Research in Higher Education 11-3 (1979) 223-32.
- Sloan Commission on Government and Higher Education. *A Program for Renewed Partnership*. Cambridge, Mass.: Ballinger, 1980.
- Smartt, Steven H. *Urban Universities in the Eighties: Issues in Statewide Planning*. Atlanta: Southern Regional Education Board, 1981. ED 202 407. MF-\$1.11. PC-\$6.79.
- Smith, Donald K. "Preparing for Enrollment Decline in a State System." In *Challenges of Retrenchment*, edited by James R. Mingle. San Francisco: Jossey-Bass, 1981.
- Spence, David S. "Budgeting of Postsecondary Education in the Eighties." *Financing Higher Education*, No. 28. Atlanta: Southern Regional Education Board, 1978.
- Spence, David S., and Weathers, George B. "Changing Patterns of State Funding." In *Challenges of Retrenchment*, edited by James R. Mingle. San Francisco: Jossey-Bass, 1981.
- Stampen, Jacob. *The Financing of Public Higher Education: Low Tuition State Aid, and the Federal Government*. AAHE-ERIC Higher Education Research Report No. 9, 1980. Washington, D.C.: American Association for Higher Education, 1980. ED 202 447. MF-\$1.11. PC-\$8.81.
- Thompson, Fred, and Zumeta, William. "A Regulatory Model of Governmental Coordinating Activities in the Higher Education Sector." *Economics of Education Review* 1 (November 1980):38-78.
- University of Wisconsin System. *Preparing for a Decade of Enrollment Decline*. Report from the Board of Regents. Madison: University of Wisconsin System, 1979. HE 015 245. MF-\$1.11. PC-\$5.14.

-
- Wallhaus, Robert A. "Process Issues in State-Level Program Reviews." In *Designing Academic Program Reviews*, edited by Richard Wilson. New Directions for Higher Education; No. 37. San Francisco: Jossey-Bass, 1982.
- Weathersby, George. "Statewide Coordination of Higher Education: Countervailing Forces Affecting Coordination." *Change* 12 (October 1980): 18, 20-24.
- Wildavsky, Aaron. *The Politics of the Budgetary Process*. 2d ed. Boston: Little Brown, 1974.
- . *Budgeting: A Comparative Theory of Budgetary Processes*. Boston: Little Brown, 1975.
- Wilson, Richard F. "Institutional Participation and Reciprocity in State-Level Program Reviews." *Journal of Higher Education* 51 (November-December 1980): 601-15.
- Wilson, Richard F., and Miller, James L., Jr. *Private College Participation in Planning and Program Review Activities of Forty-Five State-Level Higher Education Agencies*. Ann Arbor: Center for the Study of Higher Education, University of Michigan, June 1980. ED 195 209. MF51 11. PC-\$6 79.

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